www.tecnogaz.com

Dental Line

For the dental professionals

1° Edition

TECNO-GAZ
industries

Summary

Biological risk:
- Instrument sterilization
- Air sterilization
- Water sterilization

First aid in dentistry:
- Diagnosis
- Oxygen therapy
- Defibrillation

Lighting:
- Conventional lighting
- LED Vision
- Slim

Conscious sedation:
- Equipment for conscious sedation

Professional whitening:
- Equipment for professional whitening
- Product kits for professional whitening

Facial Beauty in dentistry:
- Hyperbaric oxygen technology
- Transdermal vehiculation technology
- Product kits for home use

Various - surgery:
- Medical chair, bridging table and trolley for alginates
- Syringe warmer and alginate mixer
- Polymerization lamps
- Radiology

Odontotechnical laboratory:
- Sand blasters
- Die-casting machine
- Micro-welder and Bunsens

FROM 1979 TECHNOLOGY QUALITY

Quality and reliability.

Tecno-Gaz for dental professionals

Tecno-Gaz S.p.A. operates in a number of different fields with a strong tendency towards, and specialization in, the world of dentistry, focusing on the production of equipment and devices to improve the operational practices of professionals in the field through innovative solutions and products.
For more than 30 years we have been setting ourselves the goal of finding more and more appropriate solutions to the de**mand**s of dentists and those who work with them, as well as creating products that guarantee **safety and performance** and can contribute towards improving **professional qualities.**

TECNO-GAZ Group

True professionals

Style and sales instruments are a model for every company, and no-one can compete with the **Tecno-Gaz Project.** We are, in fact, the only company to have developed an **Information and Cultural Project** that, along with a pool of professionals, tackles judicial, legal, insurance and procedural issues. A global consultancy with the objective of helping all professionals with their obligation of professional diligence, demonstrating that **Tecno-Gaz S.p.A. is a company with ideas, logic and objectives that are committed to service and to supporting the industry.**
Tecno-Gaz S.p.A. makes available **Special Updates, Publications, Protocols, DVDs and information and training CDs.**

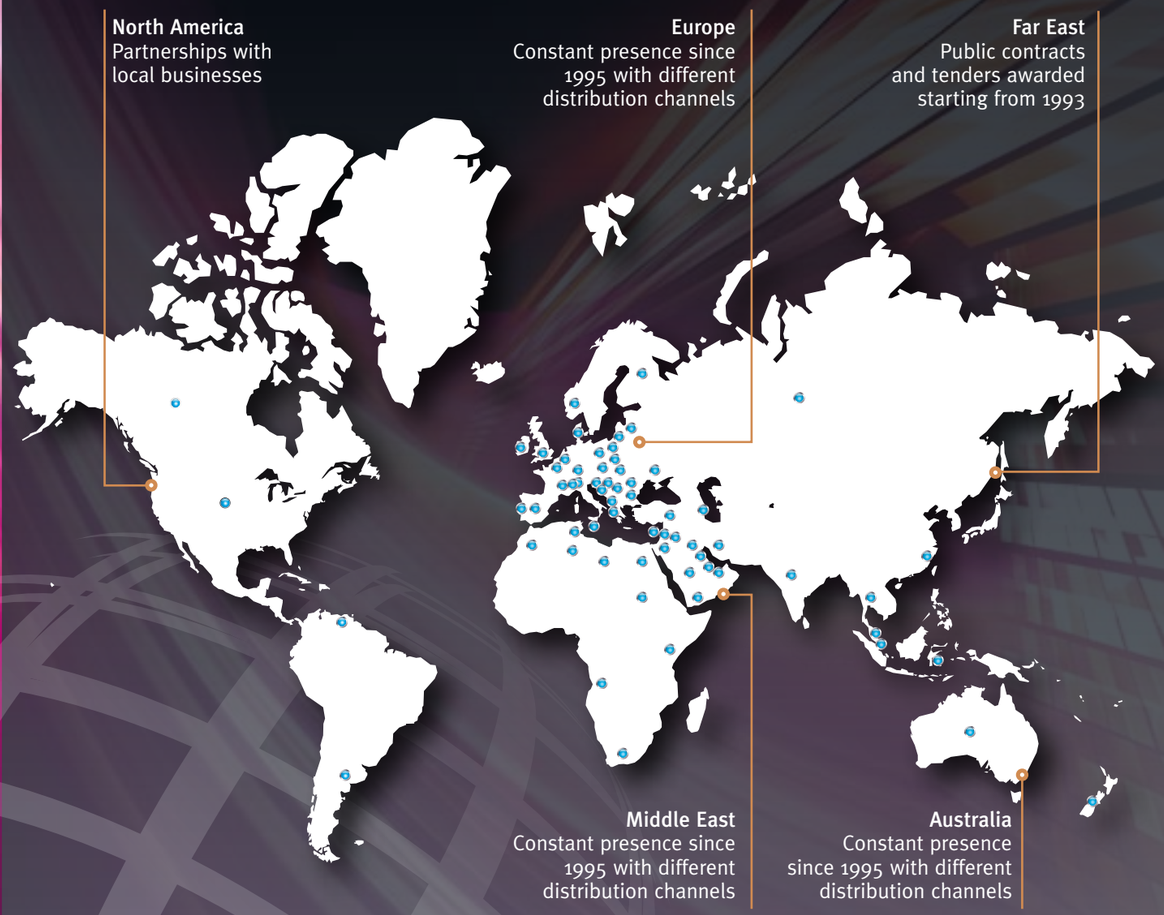
Tecno-Gaz in the world

Tecno-Gaz S.p.A. in the world, since at least 11 years we export to many countries worldwide, because we hold many certifications which allow us to be found in many international markets.

North America
Partnerships with local businesses

Europe
Constant presence since 1995 with different distribution channels

Far East
Public contracts and tenders awarded starting from 1993



Middle East
Constant presence since 1995 with different distribution channels

Australia
Constant presence since 1995 with different distribution channels

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SINCE 1979 TECHNOLOGY QUALITY

Contacts

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Do you want to receive our **NEWSLETTER?**
A LOT OF INFO AND OPPORTUNITIES
Send us your e-mail address to:
marketing@tecnogaz.com

Smart-Phone direct links

Call Tecno-Gaz

Send a mail to Tecno-Gaz

Tecno-Gaz business card

What is this code?

Is called QR-Code and allows you to obtain more info about the item that interests you. With a last generation phone equipped with web access and special software available free of charge you can use QR-Code.
Just frame and snap! You will be connected directly to the web page of the product, with brochure, video and useful info.

* the cost of web access is based on your phone contract

Frame and click! Use your mobile phone to get more information about this issue.

Biological Risk

How to prevent infections in the field of dentistry

Unique Advantages

- making traditional sterilization more effective
- saving you time and money
- providing a maximum legal guarantee

Biological risk

Instrument sterilization

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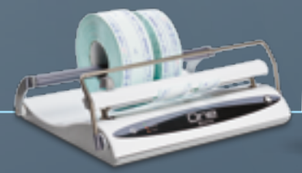

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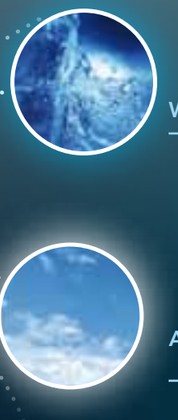

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Automatic device for shoe biological insulation

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Biological risk

Why the sterilization process?

When evaluating risks within the dental environment, biological risk is considered the main factor to be analysed and brought under control. The environment and practices of dentistry represent a risk for the transmission of pathogens, particularly those that are transmitted parenterally, if rigorous prevention methods to protect patients and operators are not applied.

Within the dental environment, the transmission of agents of contamination can happen through:

- **airborne pathways**
- **water contaminated by bio-film and back-flow of revolving instruments**
- **contaminated surgical instruments**

The concept of prevention must be considered a very real cultural and structural project to be constructed with skill and care.

Tecno-Gaz is the only company than can offer you a complete plan for managing every aspect linked to prevention within your facility.

With **Tecno-Gaz** you can have the **most complete, rational and safe plan** for instrument sterilization; no-one can count on solutions like ours, researched to make every activity safe and to guarantee maximum results.

Tecno-Gaz S.p.A. can offer you solutions for fighting airborne infections and for the management and treatment of water, the latter being an issue of absolute importance for every dental facility.

Video Operating Protocols

Tecno-Gaz has created a teaching kit for all dental assistants, with regard to sterilization. The kit includes written procedures and a DVD with filmed procedures (procedures-control tests-useful recommendations).

Artica

Disinfection vessels

Disinfection is the first phase in the sterilization cycle and its merit is two-fold: the first being biological, as it serves to fight the bacterial load, bringing the instruments up to a safe level; and the second being regulatory, expressly referring to Dlgs. (legislative decree) 81/2008 on worker's health protection. For correct disinfection it is necessary to use appropriate liquids and respect the waiting times. For this reason **Artica tanks come complete with support, with a built-in electronic digital timer. A unique solution, t**hat is indispensable for the correct management of this important phase of the cycle.

Artica vessels have been expressly studied to assure simple and controlled disinfection. All vessels are equipped with integrated timer support, total lid for easy liquid substitution and partial lid for the insertion of the instruments, avoiding the leakage of odours. Artica vessels are all supplied with plastic tray, removable on demand.
Artica line is composed by two models:

- **Artica 1 conceived for average loads, particularly suitable for surgeries.**
- **Artica 2 conceived for large loads, perfect for hospitals or big centres.**

Artica vessels are equipped with:

- **Full removable lid,** which allows the liquid to be changed easily and quickly.
- **Partial lid,** which allows instruments to be inserted without having to open the vessel completely with consequent escape of odours and fumes.
- **Support equipped with mechanical timer,** which allows the time the instruments stay in the vessel to be programmed and checked and guarantees that the disinfection process is completed correctly.
- **Internal basket** made of plastic.

Artica 1	
WxHxD	335x210x240 mm
WxHxD (support)	295x20x240 mm
WxHxD (Steel vassels)	265x52x90 mm

Artica 2	
WxHxD	335x215x500 mm
WxHxD (support)	295x30x500 mm
WxHxD (Steel vassels)	265x102x325 mm

Ask the expert

Who needs this?
Essential in medical / dental surgery and in dental laboratory.

Why a disinfection vessel?
In order to carry out a phase of chemical disinfection by immersion for instruments, aids and manufactures reducing bacterial charge.

Art. 2086-S-3 Artica 1
Art. 2087-S-3 Artica 2

Frame and click!
Use your mobile phone to get further information about this issue.

Clean

Device for instrument cleaning

Clean is a new device created for cleaning instruments.

The objective of this device is to help operators during the instrument cleansing phase, avoiding prolonged handling, thus making this phase simpler, more efficient and safer.

CLEAN is a simple device that includes the following:

- a compartment for storing and placing the instruments to be treated.
- a central compartment complete with a coiled bristle to clean the instruments.

Clean	
Height	117 mm
Diameter	122 mm
Weight	0,8 Kg

Ask the expert

Who needs this?
This is needed by all dental clinics to improve the instrument cleaning phase.

Why Clean?
Clean is a unique, simple and rational device, that helps with the correct execution of the instrument cleansing phase.
This device can be combined with the MULTISTERIL system, for the preventative removal of bi-component cements.

Art. 2070S
Clean

Frame and click!
Use your mobile phone to get further information about this issue.

Ultra

Ultrasonic cleaners

Cleansing is the most important phase in the whole sterilization cycle. In fact, a surgical instrument that still has the remains of organic material (fibrin) on it will not be able to safely undergo the correct sterilization process.
The most suitable systems for this process are undoubtedly ultrasounds that can remove blood, organic liquids and hard materials.

ULTRA model ultrasonic cleaners are the very best in cleaning systems because they rely on exclusive technological solutions. ULTRA tanks are available in the following models:

- **ULTRA 3** (capacity 3 lt.)
- **ULTRA 6** (capacity 6 lt.)
- **ULTRA 12** (capacity 12 lt.)
- **ULTRA 30** (capacity 30 lt.)

Ask the expert

Who needs this?
All medical and dental surgeries and dental laboratories.

Why an ultrasonic cleaning system?
This systems allows for the correct and efficient carrying out of the cleansing phase of instruments and materials, removing all residue including coagulated blood and hard matter.

- Art. 2790U Ultra 3 l 3 lt.
- Art. 2791U Ultra 6 l 6 lt.
- Art. 2792U Ultra 12 l 12 lt.
- Art. 2793U Ultra 30 l 30 lt.

Frame and click!
Use your mobile phone to get further information about this issue.

ULTRA • Characteristics

Liquid waste outlet with a built-in ergonomic side control.

Electronic temperature selection control.

Electronic time selection control.

Sweep-zone control **for better distribution of cavitation across the whole tank.**

Boost control **to increase power by 25%.**

De-gas control, **to eliminate gas present from the water in the tank.**

ULTRA • Optional

Universal liquids for the medical sector.
They quickly remove traces of blood and micro-organisms.

Art. 2220S
The universal intensive cleaner lt. 2,5

Art. 2225S
The universal intensive cleaner lt. 1

Avaiable versions

Ultra 3

Ultra 3 l.

Frequency	38 Khz
Absorbed power	80 W / 280 W
Capacity	2,75 lt.

Dimensions of the tank

Width	240 mm
Height	137 mm
Depth	100 mm

Ultra 6

Ultra 6 l.

Frequency	38 Khz
Absorbed power	600 W
Capacity	5,75 lt.

Dimensions of the tank

Width	300 mm
Height	150 mm
Depth	150 mm

Ultra 12

Ultra 12 l.

Frequency	38 Khz
Absorbed power	1000 W
Capacity	12,75 lt.

Dimensions of the tank

Width	300 mm
Height	240 mm
Depth Depth	200 mm

Ultra 30

Ultra 30 l.

Frequency	38 Khz
Absorbed power	1500 W
Capacity	28 lt.

Dimensions of the tank

Width	500 mm
Height	300 mm
Depht	200 mm

Ultra

Ultrasonic cleaners

Unika

Drying machine

Demonstrating yet again its great attention to growing operating needs, Tecno-Gaz has produced a unique and extremely rational mechanical device for drying the materials to be sterilized.
This device allows the obligatory drying to be performed and to avoid any handling of instruments especially sharp ones.

Unika

Width	200 mm
Height	300 mm
Depth	400 mm
Weight	13 Kg
Main voltage	220V - 50/60 Hz
Power absorption	1 W

Extra info

- Constructed entirely from stainless steel.
- Complete with double convector that conveys hot air into the drying chamber.
- Special tray supplied with the device.
- Timer.

The use

Unika is simple, rational and very fast to use. It guarantees excellent drying, which prevents any possibility of corrosion and white marks on the instruments.
Unika is an indispensable and very useful instrument that helps in the preparation of instruments and above all safeguards the operators from being pricked or cut.
The average time required to obtain a good drying is only about four minutes.

Ask the expert

Who needs this?
All medical and dental clinics.

Why a drying system?
No human intervention, removal of contamination risks, time saving, cost saving, perfect management of every phase.

Art. 2045-S-2
Unika

Frame and click!
Use your mobile phone to get further information about this issue.

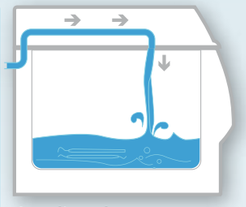
MultiSteril

Multifunction Tank

Tecno-Gaz S.p.A. has been able to create a new and revolutionary device that can automatically carry out all the major preparation phases for the sterilization cycle, such as disinfection, cleansing, rinsing, drying, without human intervention, without any professional risk and with a reduction in the overall time taken. A device that is unique in the world and indispensable for every facility that carries out sterilization.

Phases of the process

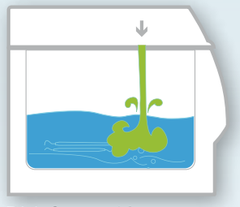
1



Loading the water

The water enters the tank thanks to the direct connection to the mains water supply.

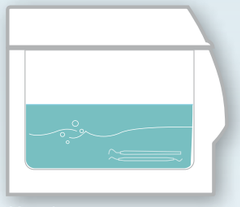
2



Disinfectant/detergent entry and liquid activation

A special peristaltic pump present **inside the device automatically introduces the percentage of disinfectant/detergent** previously outlined in the parameters of the cycle.

3



Heating

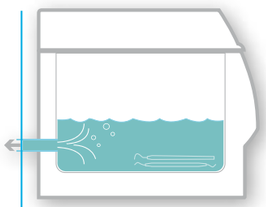
The device moves on to heating and to a first static decontamination of the instruments

4

Degasification

This process eliminates the gases dissolved in the water avoiding interference with the ultrasounds and improving efficiency.

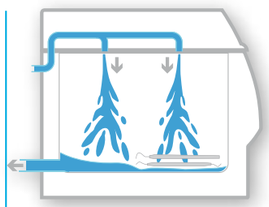
5



Ultrasonic wash

At the end of the degasification phase the ultrasonic cleansing begins, setting off the cavitation, which allows for the **removal of chemical and organic residue present on the materials immersed in the tank, destroying the bacterial load** by more than 95%. The length of this procedure can be programmed by the operator for between 5 and 30 minutes.

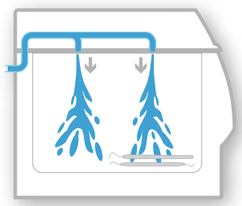
6



Waste

At the end of the cleansing phase, **MultiSteril automatically empties all the liquids present in the tank.** Once the tank is completely empty the following rinse phase begins.

7



Rinse

To remove all chemical residue from the instruments, **the rinse phase begins, taking place through the pressurised intake of water through the special nozzles in the lid.** The water taken in is then automatically removed through the mesh. At the end the drying phase is launched.

8

Drying

To guarantee a proper dying of the materials **the machine generates a flow of hot air, produced by a fan and a resistor located on the lid of the device,** which lightly touches the objects and takes away the dampness in the form of gas.

Ask the expert

Who needs this?

Indispensable in the medical and dental surgery

Why a multifunctional tank?

No human intervention, removal of contamination risks, time saving, cost saving, perfect management of every phase. Space saving.

Art. 2200S
MultiSteril

Frame and click!
Use your mobile phone to get further information about this issue.

Biological risk

Economic advantages

What costs will you have if you use Multisteril?

Almost 2 Euros per cycle including the cost of the liquid **detergent**, as well as the cost of electricity.

What savings will you make?

- **Large savings on the cost of manual labour** as your assistant will save 30-40 minutes for every cycle.
- **Your assistant will use fewer PPEs** such as gloves, goggles, gowns.
- **You will save on liquid disinfectants because they will no longer be necessary,** for the disinfection phase of the instruments.
- **You will save on the use of liquid disinfectants and time** taken for the disinfection of work surfaces at the end of every preparation.

Biological risk

The aspects that Multisteril can help you manage correctly

Time taken by assistants

Assistants take up a lot of time during the preparation phase of instrument sterilization because manual procedures are numerous and complex. **Multisteril does not require a person to be present.**

Risk Factor

The handling of instruments and potentially infected material is a very important factor and must be kept under strict control, both for the protection of the operators as well as for the owner of the surgery. **Multisteril removes any risk.**

Managing the protocol

Sterilization takes place if the procedure for the preparation of materials is correctly carried out, otherwise the whole process is compromised. **Multisteril correctly executes the entire cycle.**

Space

Space is another important problem, in fact, very often sterilization rooms have limited dimensions and the use of space takes on considerable importance. **Multisteril reduces everything to 40 cm.**

Overall costs

Cost is an important component that must be kept under control. **Multisteril costs approximately 2 Euros per cycle.**

Product info

Multisteril

Width	415 mm
Height	415 mm
Depth	450 mm
Absorption max.	1 Kw
Voltage	230V - 50/60 Hz
Weight	10 Kg

Vessel size

Width	332 mm
Height	120 mm
Depth	227 mm

Standard Accessories

Art. 2220S

The universal intensive cleaner lt. 2,5

The universal intensive cleaner in the medical sector. Removes blood, protein and secretion in a short period.

Art. SVMA069

Mesh basket

Art. 2220S

Basket for handpieces

Optional Accessories

Art. 2222S

Liquid for strong cements lt. 2,5

Solution for the removal of cement from bridges and crowns.

Art. 2210S

Tray holder + 2 trays

One

Thermosealing

ONE is a new generation sealer that has been created with the aim of reducing envelope packaging time, monitoring the quality of the welding, and is able to seal all types of paper for sterilization, including folded paper.

One assures

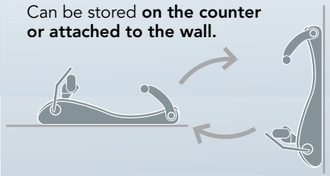
- Sealing band of **12 mm.**
- Sealing bar **32 cm.**
- Great easiness of paper introduction.
- **Active electronic control** over the couple of resistors.
- Visibility of the **area of cutting.**
- **Signal** of possible bad sealing.
- **Introducible in any sterilizing piece of furniture.**

Bar lever perfect for both right and left-handed users.

Double programme of sealing, selected through the use of the appropriate button.

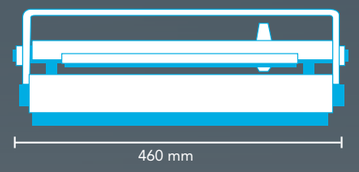
Bar lever perfect for both right and left-handed users.

Can be stored **on the counter or attached to the wall.**



One

Width	460 mm
Height	170 (240 large roll) mm
Depth	400 mm
Weight	8 Kg
Max absorption	320 Watt
Main voltage	230 V - 50/60 Hz
Seal widt	12 mm
Seal length	320 mm



Ask the expert

Who needs this?
All medical and dental surgeries.

Why a sealer?
To create paper/plastic envelopes and seal the instruments inside the envelopes. Can be stored in all sterilization furnitures.

Art. 2165-S
One

Frame and click!
Use your mobile phone to get further information about this issue.

Opera automatic

Automatic thermosealing

Opera automatic is a roller sealing machine with photocell automatic feed.
Opera Automatic is equipped with built-in printer to print on pouches packaging and expiry dates as well as symbols during the sealing phase. This solution allows to have constant control on the state of sterility of instruments. On one side of the machine there is an electronic control that allows the management of the parameters of sealing.

Extra info

- Automatic photocell feed system (7mt/min).
- Complete with integrated printer.
- Automatic printing of seal/expiry date.
- Electronic card for control/management of parameters of use.

The use

The use of this machine is simple and rational. **All the operator has to do is insert the bag with the instrument on the sealing machine support and the photocell automatically and autonomously feeds the bag, seals it and stamps the packaging data.** This action can be continuative and repetitive to ensure very high output and considerable reduction of times. All the practices that plan to certify and document all the sterilization procedures must equip themselves with Opera Automatic.

Opera Automatic

Width	485 mm
Height	163 mm
Depht	218 mm
Max absorption	600 W
Main voltage	230V - 50/60 Hz
Weight	13,5 Kg
Seal length	12 mm

Ask the expert

Who needs this?
All medical and dental surgeries.

Why an automatic sealer?
For thermosealing paper/plastic envelopes. Automatic operation ensures high time-saving production. The integrated printer allows for printing the relevant data relating to the date of packaging and expiry onto the envelope.

Art. 2042-S
Opera Automatic

Frame and click!
Use your mobile phone to get further information about this issue.

T-Paper

Envelopes and rolls for sterilization

Tecno-Gaz spa has introduced a new series of sterilization bags and rolls called T paper. These devices are designed for hospital, medical, dental, cosmetic, veterinary and podology uses and, in general, for all the personnel that carries out steam or gas sterilization processes.

Sterilization rolls 200 metres

Rolls mm 50x200 mt I Pack 8 Pcs.	Art. 400S3
Rolls mm 75x200 mt I Pack 8 Pcs.	Art. 402S3
Rolls mm 100x200 mt I Pack 4 Pcs.	Art. 404S3
Rolls mm 150x200 mt I Pack 4 Pcs.	Art. 406S3
Rolls mm 200x200 mt I Pack 2 Pcs.	Art. 408S3
Rolls mm 250x200 mt I Pack 2 Pcs.	Art. 410S3
Rolls mm 300x200 mt I Pack 2 Pcs.	Art. 412S3
Rolls mm 400x200 mt I Pack 1 Pcs.	Art. 414S3

Self-sealing bags

90x230mm (200 pieces package) 12 - package box	Art. 602S3
140x250mm (200 pieces package) 8 - package box	Art. 604S3
190x330mm (200 pieces package) 6 - package box	Art. 606S3
330x450mm (200 pieces package) 2 - package box	Art. 610S3

Standard paper

Roll Length	200 mt. standard 100 mt. (on demand)
Colour Of Plastic Material	standard green blue (on demand)
gr m^2	60 gr m^2 70 gr m^2 (on demand)

Ask the expert

Who needs this?

All medical and dental surgeries.

Why T-Paper?

T-Paper allows for maintaining the sterility of instruments for 30 days with a single envelope, or 60 days with a double envelope.

■ T-Paper

Frame and click!

Use your mobile phone to get further information about this issue.

Traccia

The "Traccia" system

The tracking of the instruments is a basic procedure for the handling of sterilized materials. Tracking guarantees the recording of the "path" taken by each and every instrument, from preparation to sterilization, until it is used. This is made possible thanks to a data cross checking management system. **Tracking is an activity that forms an integral part of the sterilization cycle procedure and should be implemented after the wrapping phase and before the autoclave is loaded. This procedure is indispensable in order to guarantee maximum legal protection to the operators and to the health director.**

Moduls specifically devised for recording sterilization cycles.

CD containing files with printable forms.

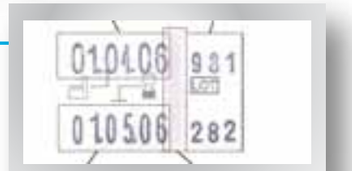
Print labels with:

- Date of sterilization
- Date of sterility expiry
- Traceability of the sterilized load, providing information as to on which patient it has been used.
- Toning with colour change.

Labels

Self-adhesive labels from the Traccia system with the necessary information as to the traceability of the sterilization.

■ Art. 228-S
Labels



Labels from the Traccia system change colour once they have been sterilized in order to guarantee the outcome of the cycle.

Ask the expert

Who needs this?

All medical and dental surgeries.

Why Traccia?

Because it is a simple, safe quick and cheap system that will greatly protect you legally. A device that is indispensable for all surgeries.

■ Art. 225/S
Traccia

Frame and click!

Use your mobile phone to get further information about this issue.

Autoclave range

Comparative table of the entire Tecno-Gaz autoclave range

* 24 litre model

Technical characteristics	Aura B Autoclave Class B loads	Alia B Autoclave Class B loads	Europa B Pro Autoclave Class B loads
Dimensions (WxHxD)	510 x 400 x 640 mm 510 x 400 x 730 mm*	510 x 400 x 640 mm 510 x 400 x 730 mm*	510 x 410 x 635 mm 570 x 390 x 730 mm**
Weight	57 Kg / 61 Kg*	57 Kg / 61 Kg*	57 Kg / 61 Kg*
Voltage	230 V - 50/60 HZ	230 V - 50/60 HZ	230 V - 50/60 HZ
Absorption	1,7 kW / 2 kW*	1,7 kW / 2 kW*	1,7 kW / 2 kW*
Chamber dimension			
Chamber diameter	245 mm	245 mm	245 mm
Chamber depth	320 mm / 500 mm*	320 mm / 500 mm*	320 mm / 500 mm*
Optional			
Internet connection	yes	no	no
Voice controls	yes	yes	no
Built-in printer	no	no	no
Sd card	yes	yes	yes
Connection for biological incubator	yes	yes	no
Automatic locking	yes	no	no
Manual locking	no	yes	yes
Provision for Pura deionizer	yes	v	yes
Overnight cycle	yes	yes	yes
PID system	yes	yes	yes
Automatic barometric alignment	yes	yes	yes

Autoclave	Type of cycle and average overall time*			
	121°	134°	Flash	Prion
Aura B	60 min.	47 min.	32 min.	62 min.
Aura B 24	56 min.	43 min.	32 min.	58 min.
Alia B	60 min.	47 min.	32 min.	62 min.
Alia B 24	56 min.	43 min.	32 min.	58 min.
Europa B Pro	60 min.	47 min.	32 min.	62 min.
Europa B Pro 24	56 min.	43 min.	32 min.	58 min.

* Overall time includes: vacuum, pre-heat, drying cycle. Times are intended to be for a fully loaded machine.

* model Europa B Evo (24 lt. chamber)

** model Andromeda Vacuum Xp Plus (20 lt. chamber)

*** model Hydra Evo Plus (22 lt. chamber)

Technical characteristics	Europa B Evo Autoclave Class B loads	Andromeda Vacuum Xp Autoclave Class S loads	Hydra Evo Autoclave Class N loads
Dimensions (WxHxD)	510 x 390 x 590 mm 510 x 390 x 730 mm*	442 x 385 x 500 mm 442 x 385 x 500 mm**	442 x 385 x 500 mm 442 x 385 x 500 mm***
Weight	54 Kg / 58 Kg	35 Kg / 35 Kg*	54 Kg / 58 Kg
Voltage	230V - 50/60 Hz	230 V - 50/60 HZ	230V - 50/60 Hz
Absorption	1,7 kW / 2,2 kW*	2,2 kW / 2,2 kW**	1,5 kW / 1,5 kW***
Chamber dimension			
Chamber diameter	245 mm	245 mm	245 mm
Chamber depth	320 mm / 500 mm*	320 mm / 430 mm*	320 mm / 400 mm*
Optional			
Internet connection	no	no	no
Voice controls	no	no	no
Built-in printer	yes	yes	no
Sd card	no	no	no
Connection for biological incubator	yes	no	no
Automatic locking	no	no	no
Manual locking	yes	yes	yes
Provision for Pura deionizer	yes	no	no
Overnight cycle	yes	yes	yes
PID system	yes	no	no
Automatic barometric alignment	yes	no	no

Autoclave	Type of cycle and average overall time*								
	121°	121° unwrapped	121° wrapped	134°	134° unwrapped	134° wrapped	134° Fash	134° Prion	Special
Europa B Evo	60 min.			47 min.			32 min.	62 min.	
Europa B Evo24	56 min.			43 min.			32 min.	58 min.	
Andromeda Vacuum Xp		50 min.	53 min.		38 min.	43 min.			23 min.
Andromeda Vacuum Xp Plus		50 min.	53 min.		38 min.	43 min.			23 min.
Hydra Evo	38 min.			24 min.					
Hydra Evo Plus	38 min.			24 min.					

* Overall time includes: vacuum, pre-heat, drying cycle. Times are intended to be for a fully loaded machine.

Biological risk

Aura B

a new generation of autoclaves begins

Internet connection
for remote assistance
for sending information to the customer
for gathered data saving

AURA B is representing a revolution in the world of the sterilizers designed for the B type loads. **It is the fist autoclave in the world which is able to connect to Internet, for the software upgrade, to download the sterilization data, to get technical support in real time and to receive useful information directly on the display of the device. Useful voice alert supports and informs the operator in different procedures,** by making the interact with the autoclave easy and intuitive. AURA B is installed by authorised technicians, equipped to connect the autoclave to the service servers, **using the connections available:**

- **ADSL standard ETHERNET**
- **ADSL standard Wi-Fi** (with accessories on request)

A real devolution, that allows you to have a constant control on this important device, that is qualified to receive services and transmit data.

Ask the expert

Who needs this?
All medical and dental surgeries.

Why Aura B?
Because it is it is the **most highly-developed autoclave in the world**, and is able to exploit all the benefits that modern technology offers us, ensuring service, as well as **time and cost savings.**

- Art. 2036S
  Aura B
- Art. 2037S
  Aura B 24

Frame and click! Use your mobile phone to get further information about this issue.

The most advanced autoclave in the world

Software Update

AURA B was created to be constantly updated, in fact, on confirmation by the operator it receives and downloads any available revisions present on the appropriate service server. An unusual solution that continually improves the performance of your device, getting the most out of it and maintaining its high cost value.

Constant telemetry

A telemetry control system constantly **monitors the historic data that the autoclave transmits to the service server,** which is analysed and managed in the event of anomalies.

The autoclave becomes a communication tool

It is possible to receive messages sent from the manufacturer, the device or from the distributor directly on the autoclave's display. **Messages, information, invitations and offers can be received in this way; a whole professional communication system.**

SOS Service

In the event of problems you can request help without losing time on the phone or waiting!!! All you have to do is press the SOS button and a message will be sent automatically to the help centre who will be able to make a remote diagnosis of your autoclave, **and can intervene directly or indirectly to resolve the problem.**

Internet archiving of cycles carried out

AURA B has an in-built system that automatically takes care of sending all the data relating to the cycle carried out to the service server at the end of every cycle. The server stores the data in a client/registration number folder, protected by a back-up service, for a period of 10 years (period of legal responsibility). **In the event that the connection is not available the data will be held in the internal memory** present in the autoclave and then downloaded onto the server as soon as the connection has been re-established. **All the data is available to the dentist.**

Internet archiving of cycles carried out

AURA B helps you to comply with the duty of traceability, thanks to its built-in software that allows it to print the labels with information and bar codes. You just need to equip yourself with an appropriate printer (optional art. 2162S) and a bar code reader (optional art. 2163S) **to be able to carry out all the phases of computerised traceability.**

PID System

PID ensures constant control and monitoring of the entire functional system of the autoclave, intervening automatically in the event of anomalies outside the correct technical and electronic parameters of the autoclave.

Barometric Alignment

Automatic barometric alignment is set the first time the device is switched on.

Overnight Cycles

Automatic overnight cycles, with an anti-condensing system and automatic switch-off.

Your autoclave talks to you

As well as its unusual IT functions, AURA B can count on one **exclusive and distinctive feature of great importance: its voice function.** AURA B gives voice commands that assist the operator in using the device. In the event of errors or anomalies the machine "generates" a HELP sign on the display, that, if activated by the operator, provides indications and useful information as to the solution to the problem.

Accessories

Art.N.SPLA349	Special dual-purpose tray carrier
Art. 2110S	Printer for printing traceable labels.
Art.2112S	Roll of labels for traceability.
Art.2114S	Network cable
Art.2115S	Network bridge wifi

Aura B

Simple, safe and cutting-edge

Automatic Locking

Automatic locking is an exclusive system, based on innovative solutions that involve electronics, mechanics and dynamics. A mix of technology able to guarantee complete safety in all conditions, even the most extreme. All you need to do is close the hatch and start the cycle. Thanks to the vacuum, the hatch is closed and blocked by mechanisms that are immediately activated. A system with multi-level safety created to guarantee maximum safety.

SD Card

Collection and registration of the data relating to the cycles of sterilizations are carried out through SD card.

B-test connection

Periodically check the autoclave working order is a duty set forth by the current regulations. **Tecno-Gaz has thus equipped AURA B autoclave with a system for the connection to and the management of the biological incubator.**

Provision for mains water supply

The osmosis system mod. Pura Plus is an extremely compact piece of equipment for osmosis, created to be directly connected to the autoclave, guaranteeing a constant supply.

Barometric alignment

Automatic barometric alignment is provided from the first time the device is switched on, without any technical interventio

Aura B	Aura B 24
Width 510 mm	510 mm
Height 410 mm	410 mm
Depht 635 mm	775 mm
Weight 60 Kg	64 Kg
Main voltage 230V - 50/60 Hz	230V - 50/60 Hz
Power absortion 1,7 Kw	2 Kw

Sterilization chamber dimensions

Diameter	245 mm	245 mm
Depht	318 mm	500 mm

Sterilization cycles

- **OVERNIGHT CYCLE**
- **134°C – 121°C CYCLES** universal, both for wrapped and unwrapped instruments, all for type B loads.
- **FLASH CYCLE** for rapid sterilizations, on unwrapped instruments for type B loads.
- **PRION CYCLE**
- **TEST CYCLES** Bowie &Dick, Helix Test, Vacuum Test.
- Built-in anti-condensing system present in all cycles.

Available versions

Art. 2036S Autoclave mod. **AURA B**

Art. 2037S Autoclave mod. **AURA B24 with osmosis system**

AURA B 24 allows for the sterilization of large loads and of particularly long instruments. This model is particularly recommended for medium-large surgeries, group practices and centres where there is a high use of instruments and devices. **AURA B 24 is fitted with the inverse osmosis system mod. Pura.**

Alia B

the new generation of autoclaves is created

ALIA B is a new generation autoclave following on from the innovative AURA B project, using many of the same technologies used by our leading model. The development of this technology is the result of long research and has involved various divisions of Research and Development both within and outside our company. ALIA B is a project with unique solutions and characteristics and cannot be compared with other models on the market.

Ask the expert

Who needs this?
All medical and dental surgeries.

Why Alia B?
Because it can exploit all the benefits that modern technology **offers us ensuring service, time and cost savings.**

- Art. 2038S Alia B
- Art. 2039S Alia B 24

Frame and click! Use your mobile phone to get further information about this issue.

Characteristics

Electronic control
ALIA B is managed by a new electronic system, equipped with **last-generation microprocessor.**

Cooling system
new cooling system, with double-body radiator.

Sterilization cycles
121°C-134°C suitable for both wrapped and free materials.
All cycles are for type-B loads.

Load traceability management
ALIA B helps you to comply with the duties of traceability. Thanks to the built-in software, it allows you to print labels with data and bar codes. You just need to equip yourself with an appropriate printer (optional art. 2162S) and a bar code reader (optional art. 2163S) to be able to carry out all the phases of computerised traceability.

Software Update
ALIA B has been created to be continually updated by SD CARD, **a simple and quick way to keep your device constantly updated.**

Voice functions
ALIA B can also count on an exclusive feature of great importance: its voice function.

P.I.D. system
Constant control and monitoring of the entire autoclave functional system.

Barometric alignment
Automatic barometric alignment, that is set the first time the device is switched on.

Overnight cycles
Automatic overnight cycles, with an anti-condensing system and automatic switch-off.

Biological risk

Listen to your autoclave!

Your Autoclave Talks to You

ALIA B can also count on an exclusive feature of great importance: its voice function. **ALIA B gives voice controls, which help the operator to use the device.**
In the event of errors or anomalies, the machine "generates" a HELP sign on the display, that if activated by the operator, provides indications and useful information as to a solution to the problem.

Easier for operators

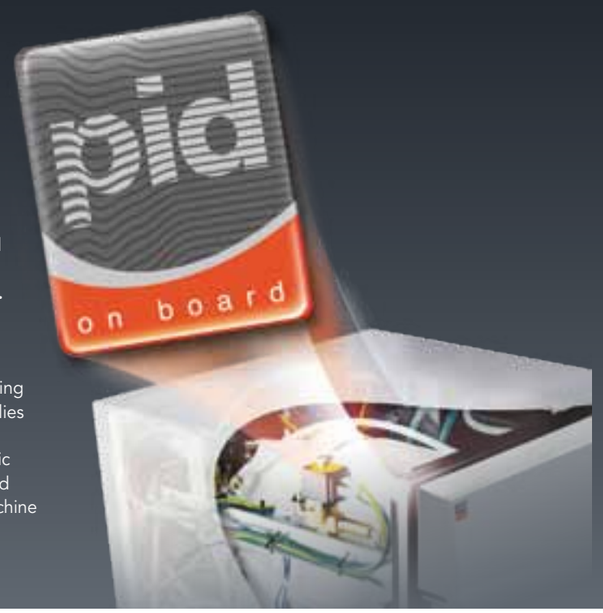
Accessories

Art.N.SPLA349	Special dual-purpose tray carrier
Art. 2110S	Printer for printing labels.
Art.2112S	Roll of labels for traceability

Autoclaves that guarantee safe sterilization

PID system

The main commitment of a company like Tecno-Gaz is to manufacture products with unique features, distinguishing traits and concepts that ensure maximum reliability and safety to the user. Our research offices, together with support and assistance of external institutions have devised an extraordinary system that has been applied for the first time to our autoclaves. This innovative device is called P.I.D.
P.I.D. means Proportional Integral Derivate and represents the apex of closed loop controls. The structure of this technologically advanced control is simple and flexible. P.I.D. ensures a constant control and monitoring of the whole operating system of the autoclave, acting automatically in case of anomalies or incorrect values in technical and electronic parameters. This device behaves like a "real technician" with real-time diagnostic and intervention capability. This solution reduces anomalies and warnings, granting maximum reliability and minimising the machine inactivity times (if any) garantendo massima affidabilità.



Alia B
Simple, safe and cutting-edge

Safety on the door

We have applied three safety devices on the autoclave door:

- **The first device is a mechanic and electromagnetic one:** it triggers when the sterilization cycle begins and completely blocks the door opening. This device can be removed at the end of the cycle by pushing the device-unlocking button, but only if positive pressure is near zero.
- **The second device is an electrical one:** it triggers automatically when an attempt to force the door open is detected.
- **The third device is dynamic** and acts on the structure of the gasket.

SD Card

Collection and registration of the data relating to the cycles of sterilizations are carried out through SD card. Questo sistema permette anche di poter aggiornare il software dell'autoclave senza alcun intervento tecnico, ma semplicemente inserendo una apposita SD CARD.

Connection to B-test

Periodically check the autoclave working order is a duty set forth by the current regulations. **Tecno-Gaz has therefore equipped ALIA B autoclave with a system for the connection to and management of the biological incubator.**

Provision for mains water supply

The Pura osmosis system is an extremely compact, osmosis device designed for connection directly to the autoclave, to guarantee a constant supply.

Barometric alignment

Automatic barometric alignment, is provided from the first time the device is switched on, without any technical intervention.

Alia B		Alia B 24
Width	510 mm	510 mm
Height	410 mm	410 mm
Depth	635 mm	730 mm
Weight	60 Kg	64 Kg
Main Voltage	230V - 50/60 Hz	230V - 50/60 Hz
Absorbed power	1,7 Kw	2 Kw
Sterilization chamber dimension		
Diameter	245 mm	245 mm
Depth	320 mm	500 mm

Sterilization cycles

- **OVERNIGHT CYCLE**
- **134°C – 121°C CYCLES** universal, both for wrapped and unwrapped instruments, all for type B loads.
- **FLASH CYCLE** for rapid sterilizations, on unwrapped instruments for type B loads.
- **PRION CYCLE**
- **TEST CYCLES** Bowie &Dick, Helix Test, Vacuum Test.
- Built-in anti-condensing system present in all cycles.

Available versions

Art. 2038S Autoclave mod. **ALIA B**

Art. 2039S Autoclave mod. **ALIA B24 with osmosis system**

Alia B 24 allows for the sterilization of large loads and of particularly long instruments. This model is particularly recommended for medium-large surgeries, group practices and centres where there is a high use of instruments and devices. **Alia B 24 is fitted with the inverse osmosis system mod. Pura.**

Biological risk

Europa B Evo

Fractional vacuum steam autoclave

Europa B Evo is an autoclave that has been developed jointly by the Tecno-Gaz research office and important external development facilities. **Europa B Evo is indispensable** for all medical and dental facilities and in all fields **where safe sterilization of all materials is required: hollow, porous, solid, wrapped and unwrapped.** Europa B Evo continues the success that Tecno-Gaz has achieved over the years, in fact, **thousands of professionals use Tecno-Gaz autoclaves and are very satisfied.**

Built-in connection for a biological B-Test incubator

On the front right-hand side is a B-test incubator connection **that is managed directly by the machine.**

Safety on the door

We have applied three safety devices on the autoclave door:

- **The first device is a mechanic and electromagnetic one:** it triggers when the sterilization cycle begins and completely blocks the door opening. This device can be removed at the end of the cycle by pushing the device-unlocking button, but only if positive pressure is near zero.
- **The second device is an electrical one:** it triggers automatically when an attempt to force the door open is detected.
- **The third device is dynamic** and acts on the structure of the gasket.

Safety devices in place

- Certified **safety valve**.
- **Ped on** sterilization **chambers**.
- **Insulation of the chamber** with certified ceramic material.

Close-up view of the front of an Europa B Evo autoclave

Ask the expert

Who needs this?

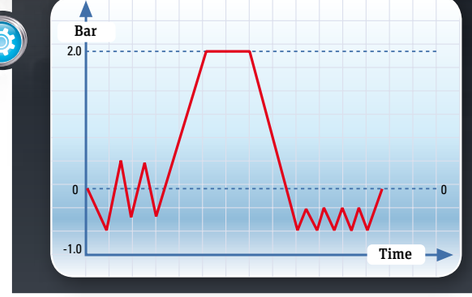
All medical and dental surgeries.

Why a class B autoclave?

An autoclave conforming to EN 13060 is the very best of technology and safety in terms of sterilization. It ensures maximum efficiency in the sterilization of all instruments including those that are hollow and porous, typical in a dental surgery. Given the level of surgery achieved by dentists a class B autoclave is an instrument that is undoubtedly indispensable for all practices.

- Art. 2033S2 Europa B Evo
- Art. 2034S Europa B Evo 24

Frame and click! Use your mobile phone to get further information about this issue.



Technical characteristics

Pressure dynamics during a sterilization cycle with Tecno-Gaz Europa B EVO autoclaves.

Biological risk

Autoclaves that guarantee safe sterilization

Technical characteristics

The main commitment of a company like Tecno-Gaz is to manufacture products with unique features, distinguishing traits and concepts that ensure maximum reliability and safety to the user. Our research offices, together with support and assistance of external institutions have devised an extraordinary system that has been applied for the first time to our autoclaves. This innovative device is called P.I.D.
P.I.D. means Proportional Integral Derivate and represents the apex of closed loop controls. The structure of this technologically advanced control is simple and flexible. P.I.D. ensures a constant control and monitoring of the whole operating system of the autoclave, acting automatically in case of anomalies or incorrect values in technical and electronic parameters. This device behaves like a "real technician" with real-time diagnostic and intervention capability. This solution reduces anomalies and warnings, granting maximum reliability and minimising the machine inactivity times (if any).

Pre-set cycles without handling

All cycles are pre-set and always guarantee safe sterilization of the materials being treated. There is no possibility of intervention or handling in the cycles on the part of the operators. Thus avoiding any type of possible human error.

All cycles ensure the sterilization of type B loads

All sterilization cycles have a fractional vacuum system, controls and parameters that ensure the sterilization of type B loads. Even an incorrect selection of the desired cycle always ensures the safe sterilization of all types of material being treated.

Ergonomic and easy to use

You only need to press a button to select the cycle, and another button to start the whole process. It is impossible to make a mistake, impossible to choose a cycle that does not ensure correct sterilization, any kind of operator error is signalled by error messages. The autoclave can be used by more than one person without the chance of causing damages or problems. Even for this important aspect, Tecno-Gaz wants to provide maximum operator safety.

Europa B Evo	Europa B Evo 24
Width 510 mm	510 mm
Height 390 mm	390 mm
Depth 590 mm	730 mm
Weight 54 Kg	58 Kg
Main voltage 230V - 50/60 Hz	230V - 50/60 Hz
Absorbed power 1,5 Kw	2 Kw
Sterilization chamber dimension	
Diameter 245 mm	245 mm
Depth 320 mm	500 mm

Sterilization cycles

- **OVERNIGHT CYCLE**
- **134°C – 121°C CYCLES** universal, both for wrapped and unwrapped instruments, all for type B loads.
- **FLASH CYCLE** for rapid sterilizations, on unwrapped instruments for type B loads.
- **PRION CYCLE**
- **TEST CYCLES** Bowie &Dick, Helix Test, Vacuum Test.
- Built-in anti-condensing system present in all cycles.

Europa B Evo

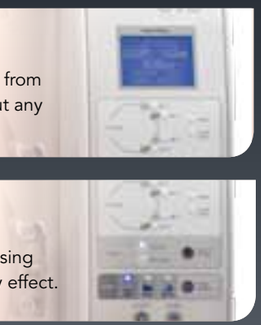
Safe, easy, cutting-edge

Built-in printer

Built-in printer for the registration of cycles carried out. The printer includes:
- date, time
- cycle number
- serial number of the device
- minute by minute cycle data
- outcome of the cycle

Barometric alignment

Automatic barometric alignment is provided from the first time the device is switched on, without any technical intervention.



Overnight cycles

Automatic overnight cycles with anti-condensing system and automatic switch-off, with memory effect.

Connection to B-test

Periodically checking the efficiency of the autoclave is a duty sanctioned by the regulations in force. **Tecno-Gaz has thus fitted the Europa B Evo autoclave with a connection and management system of the biological incubator.**

Accessories

Art.N.SPLA349	Special dual-purpose tray carrier
Art. 276-S	Memory card

The osmosis system mod. Pura.

Plus is an extremely compact osmosis device, created to be directly connected to the autoclave, guaranteeing a continuous supply.

Available versions

Art. 2033S Autoclave mod. **Europa B Evo**

Art. 2034S Autoclave mod. **Europa B Evo24 with osmosis system**

Europa B Evo24 allows for the sterilization of large loads and of particularly long instruments.
This model is particularly recommended for medium-large surgeries, group practices and centres where there is a high use of instruments and devices. **Europa B Evo24 is fitted with the inverse osmosis system mod. Pura. It also directly connects to and manages the B-test spores biological incubator.**

Biological risk

Europa B Pro

autoclave for the sterilization of type B loads

Europa B Pro is an autoclave designed using new technology suitable for the sterilization of type B loads.
Europa B Pro can count on sophisticated solutions, which make it the autoclave with the best quality/price ratio on the market.

Ask the expert

Who needs this?
All medical and dental surgeries.

Why Europa B Pro?
Because it is a very latest-generation model, with a quality/price ratio that cannot be matched on the market.

- Art. 2040S Europa B Pro
- Art. 2041S Europa B Pro24

Frame and click! Usa il tuo elefonino per avere ulteriori info su questo argomento.

Safety on the door

We have applied three safety devices on the autoclave door:

- **The first device is a mechanic and electromagnetic one:** it triggers when the sterilization cycle begins and completely blocks the door opening. This device can be removed at the end of the cycle by pushing the device-unlocking button, but only if positive pressure is near zero.
- **The second device is an electrical one:** it triggers automatically when an attempt to force the door open is detected.
- **The third device is dynamic** and acts on the structure of the gasket.

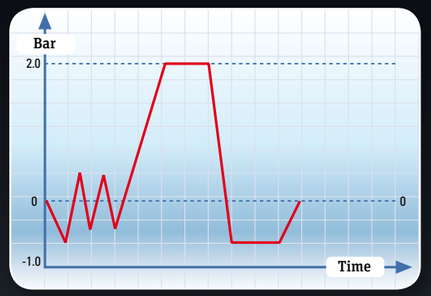
Safety devices in place

- Certified **safety valve**.
- **Ped on** sterilization **chambers**.
- **Insulation of the chamber** with certified ceramic material.

Close-up view of the front of an Europa B Evo Pro autoclave

Technical characteristics

Pressure dynamics during a sterilization cycle with Tecno-Gaz Europa B EVO Pro autoclaves.



Electronic control

Europa B Pro is managed by a new electronic system, equipped with a **latest generation micro-processor.**

Cooling system

New cooling system
with a double-bodied radiator.

Sterilization cycles

121°C-134°C suitable both for wrapped and unwrapped materials.
All cycles are for type B loads.

Biological risk

Autoclaves that guarantee safe sterilization

Technical characteristics

The main commitment of a company like Tecno-Gaz is to manufacture products with unique features, distinguishing traits and concepts that ensure maximum reliability and safety to the user. Our research offices, together with support and assistance of external institutions have devised an extraordinary system that has been applied for the first time to our autoclaves. This innovative device is called P.I.D.
P.I.D. means Proportional Integral Derivate and represents the apex of closed loop controls. The structure of this technologically advanced control is simple and flexible. P.I.D. ensures a constant control and monitoring of the whole operating system of the autoclave, acting automatically in case of anomalies or incorrect values in technical and electronic parameters. This device behaves like a "real technician" with real-time diagnostic and intervention capability. This solution reduces anomalies and warnings, granting maximum reliability and minimising the machine inactivity times (if any).

Pre-set cycles without handling

All cycles are pre-set and always guarantee safe sterilization of the materials being treated. There is no possibility of intervention or handling in the cycles on the part of the operators. Thus avoiding any type of possible human error.

All cycles ensure the sterilization of type B loads

All sterilization cycles have a fractional vacuum system, controls and parameters that ensure the sterilization of type B loads. Even an incorrect selection of the desired cycle always ensures the safe sterilization of all types of material being treated.

Ergonomic and easy to use

You only need to press a button to select the cycle, and another button to start the whole process. It is impossible to make a mistake, impossible to choose a cycle that does not ensure correct sterilization, any kind of operator error is signalled by error messages. The autoclave can be used by more than one person without the chance of causing damages or problems. Even for this important aspect, Tecno-Gaz wants to provide maximum operator safety.

Europa B Pro	Europa B Pro 24
Width 504 mm	504 mm
Height 400 mm	400 mm
Depht 640 mm	730 mm
Weight 70 Kg	74 Kg
Main voltage 230V - 50/60 Hz	230V - 50/60 Hz
Power absortion 1,7 Kw	2,2 Kw

Sterilization chamber dimension

Diameter	245 mm	245 mm
Depht	318 mm	500 mm

Sterilization cycles

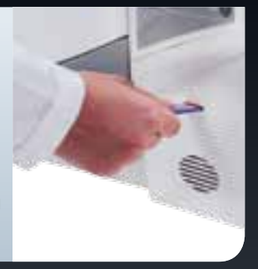
- **OVERNIGHT CYCLE**
- **134°C – 121°C CYCLES** universal, both for wrapped and unwrapped instruments, all for type B loads.
- **FLASH CYCLE** for rapid sterilizations, on unwrapped instruments for type B loads.
- **PRION CYCLE**
- **TEST CYCLES** Bowie &Dick, Helix Test, Vacuum Test.
- Built-in anti-condensing system present in all cycles.

Europa B Pro

Safe, easy, cutting-edge

SD Card

Collection and archiving of data relating to the cycles and the monitoring of the autoclave are carried out through an SD card. This system also allows for the software of the autoclave to be updated without any technical intervention, but simply by inserting a suitable SD CARD.



Barometric alignment

Automatic barometric alignment is provided from the first time the device is switched on, without any technical intervention.

Overnight cycles

Automatic overnight cycles with anti-condensing system and automatic switch-off, with memory effect.

Provision for mains water supply

The osmosis system mod. Pura Plus is an extremely compact piece of equipment for osmosis, created to be directly connected to the autoclave, guaranteeing a constant supply.

Accessories

Art.N.SPLA349	Special dual-purpose tray carrier
Art. 276-S	Memory card

Available versions

Art. 2040S Autoclave mod. **Europa B Pro**

Art. 2041S Autoclave mod. **Europa B Pro24 with osmosis system**

Europa B Pro 24 allows for the sterilization of large loads and of particularly long instruments. This model is particularly recommended for medium-large surgeries, group practices and centres where there is a high use of instruments and devices. **Europa B Pro24 is fitted with the inverse osmosis system mod. Pura.**

Biological risk

Andromeda Vacuum XP

Steam autoclave with pump

Andromeda Vacuum XP is provided with a powerful vacuum pump which, at the beginning of the cycle, ejects the airpockets which are into the sterilization's chamber, and, at the end of the sterilization's phase, grants a very good drying. **A sophisticated electronic device grants a constant monitoring of pressure,** temperature and time. It can work also without the presence of the operator, as all the functions are automatic. **Andromeda Vacuum XP** has an electromagnetic block device on the door. The total automatism of each phase of the cycle prevents from any possible human error, also from inexperienced personnel. Stainless steel chamber, uniformly heated by a band heating element. Twin tank for clean and used water: **Andromeda Vacuum XP is provided with 5 cycles of sterilization: 121° C and 134° C for unwrapped and wrapped instruments, and a "flash" cycle for the fast sterilizations. Andromeda Vacuum XP is supplied together with the printer built-in-into the drive board.**

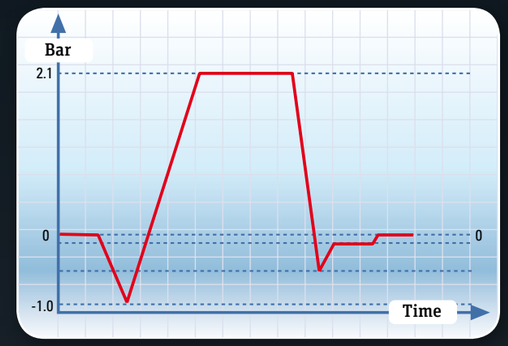
Autoclaves certified for type S loads include hollow type B bodies (pipes or instruments with a large cavity) as well as resistant thermoplastics, wrapped and unwrapped solid materials.

Available in 2 versions (standard and 20 litres

Mechanical pump-generated vacuum

The autoclaves mod. Andromeda Vacuum Xp Plus - Andromeda Vacuum Xp, adopt a pump vacuum system. Before the sterilization cycle, a pump generates a powerful depression or vacuum, removing all the air pockets present in the sterilization chamber and inside the wrappings and materials themselves. **The vacuum pump is constructed with special membranes for the aspiration of hot air and steam. The pump-generated vacuum also ensures optimum quality of the sterilization cycle for both wrapped and unwrapped instruments.** At the end of the sterilization cycle, the pump starts up again to facilitate and improve the drying phase. **The vacuum system is adopted for autoclaves that are able to sterilize S type loads.**

• Pressure dynamics during sterilization with Tecno-Gaz autoclaves.



Safety on the door

We have applied three safety devices on the autoclave door:

- **The first device is a mechanic and electromagnetic one:** it triggers when the sterilization cycle begins and completely blocks the door opening. This device can be removed at the end of the cycle by pushing the device-unlocking button, but only if positive pressure is near zero.
- **The second device is an electrical one:** it triggers automatically when an attempt to force the door open is detected.
- **The third device is dynamic** and acts on the structure of the gasket.

Safety devices in place

- Certified **safety valve**.
- **Ped on** sterilization **chambers**.
- **Insulation of the chamber** with certified ceramic material.

Ask the expert

Who needs this?

Medical centres that do not have to **sterilize hollow or porous bodies, beauty centres.**

Perché Andromeda Vacuum xp:

- Fully automatic autoclave.
- It has many features and accessories.
- Available in 2 versions (standard or 20 litres).
- Excellent **quality/price ratio.**

- Art. 2053-S Andromeda Vacuum XP
- Art. 2053CL-S Andromeda Vacuum XP Plus

Frame and click! Use your mobile phone to get further information about this issue.

Andromeda Vacuum XP	Andromeda Vacuum XP Plus
Width	450 mm	450 mm
Height	385 mm	385 mm
Depht	540 mm	660 mm
Weight	50 Kg	55 Kg
Main voltage	230V±10% A.C.	230V±10% A.C.
Frequency	50/60 HZ	50/60 HZ

Sterilization chamber dimension

Diameter	243 mm	243 mm
Depht	320 mm	430 mm

Optional

Special double-use tray holder

Special tray holder designed to hold 4 standard open trays and 3 trays with cover.

Art. N.SPLA349

Hydra Evo

Steam autoclave

Hydra Evo is steam autoclave for the sterilization.

- **2 sterilization cycles:** possibility of choosing two cycles at 134°C or 121°C.
- **Automatic phases** of preheating, sterilization cycle and drying.
- **Closure system with an operator safety pivot.**
- **Air pokets automatic ejection system**: thermodynamic system for the ejection of the "cold" air pockets.
- **Stainless steel chamber:** the sterilization chamber is made entirely of stainless steel and is heated by a band shaped heating element which guarantees uniformity of heat.
- **4 aluminium trays**.

Autoclaves certified for type N loads include solid, flat, unwrapped instruments.

Ask the expert

Who needs this?

The use of this device is greatly reduced as it **can only be used for solid and unwrapped bodies.**

Why Hydra Evo?

- **Simple and ergonomic** autoclave
- Because it is fitted with a **new highly-developed Electronic control system**
- Because it has extremely **low management costs**
- It is available in a **PLUS version with a 22 litre chamber.**

- Art. 2066/S-2 Hydra Evo
- Art. 2066-L-S-2 Hydra Evo Plus

Frame and click! Use your mobile phone to get further information about this issue.

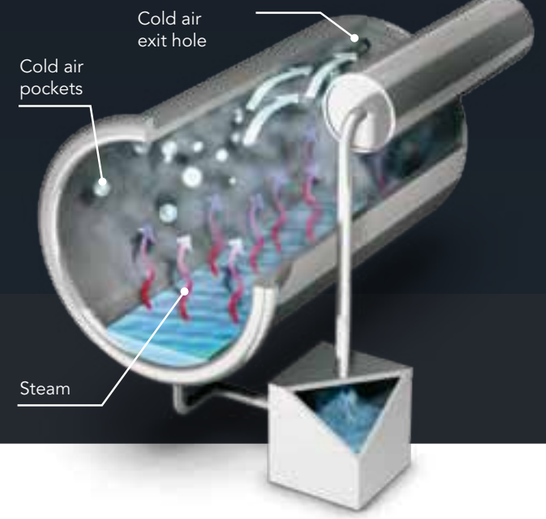
This product stands out mainly thanks to:

- **Electronic control with digital display, allowing the digital display of times and temperature.**
- **Control of the sterilization process,** through microprocessor management with a constant measurement system.
- **Operation control,** blocking the autoclave in the event that there is a lack or an inadequate quantity of water in the chamber.

Thermodynamic Vacuum

The thermodynamic movement of the steam pushes cold air pockets present inside the chamber from top bottom towards the exit hole controlled by a solenoid valve managed by the microprocessor.

This method improves the quality of the sterilization, although there are no checking or measuring systems on the process carried out. This vacuum system is normally used in type N autoclaves.



Available Versions

Hydra Evo Plus
Art. 2066-L-S-2

Hydra Evo	Hydra Evo Plus
Width	442 mm	442 mm
Height	385 mm	385 mm
Depht	500 mm	500 mm
Weight	35 Kg	35 Kg
Main voltage	220V 50/60 HZ	230V±10% A.C.
Power absortion	1,3 Watt	1,3 Watt
Sterilization chamber dimension		
Diameter	243 mm	243 mm
Depht	320 mm	400 mm

Sterilization cycles

cycles	Overall average cycle time*
121° unwrapped	38 min.
134° unwrapped	28 min.

** Overall time includes: vacuum, pre-heat, drying cycle. Times are intended to be for a fully-loaded machine.*

Biological risk

Pura System

Pura - Pura Plus - Pura Duo

Devices for supplying autoclaves

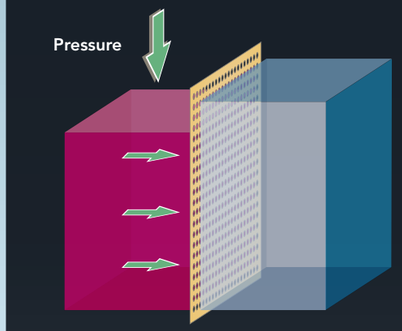
The Pura osmosis system is extremely compact and it's designed for connection directly to the autoclave, to guarantee a constant supply of pure water. The system can be installed in a number of positions to facilitate mounting and the optimum organisation of the available space. **Pura is fitted with a series of osmotic membranes and filters,** with an average duration of about 800 cycles, depending on the original hardness of the water. The cartridge should therefore need replacing about once a year, or after 800 cycles. **The overall cost of the filters is very reasonable, and the cost per litre is therefore almost negligible. When the Pura system is not producing water, it is not pressurized, and this avoids all kinds of problems caused by the accidental breakage of couplings and fitting.**

Pura - Pura Plus - Pura Duo

Width	350 mm
Height	300 mm
Depht	150 mm
Weight	3,5 Kg
Main voltage	230V 50 HZ
Max. power absorption	20 W

Inverse osmosis

Inverse osmosis is the safest and most widely used water purification system in the world. In fact, through this system pollutant particles of infinitesimal dimensions are removed, thereby guaranteeing water purity. This is made possible by an osmotic membrane, the real focal point of the system, which has the capability to filter water down to molecular dimensions, endowing it with optimal characteristics as regards both bacteriological and organoleptic purity. **Inverse osmosis is, as the name itself suggests, the inverse process to that which usually occurs in nature.**



This procedure is achieved thanks to a force (the pressure of the hydraulic network) which pushes the water with the more concentrated solution, i.e. that "with pollutants" towards a semimpermeable osmotic membrane, thereby producing pure water. In this way 99.99% of organic substances and over 90% of inorganic substances are removed.

Ask the expert

Who needs this

This can be used by all those who own autoclaves **from the Tecno-Gaz 2010 line.**

- Art. 247-S2 Pura
  (Can be connected to a Europa B Evo line)
- Art. 249-S2 Pura Plus
  (Can be connected to the AURA and/or ALIA lines)
- Art. 245S2 Pura Duo
  (Can be connected to two Europa B Evo lines)

Why an autoclave osmosis system?

The osmosis system is recognised as the best method, ensuring treated water free from impurities and hard particles in order to protect the workings of the autoclave. The system allows for a direct connection with the autoclave, ensuring service and a reduction in costs relating to the purchase of distilled water.

Frame and click! Use your mobile phone to get further information about this issue.

Distiller

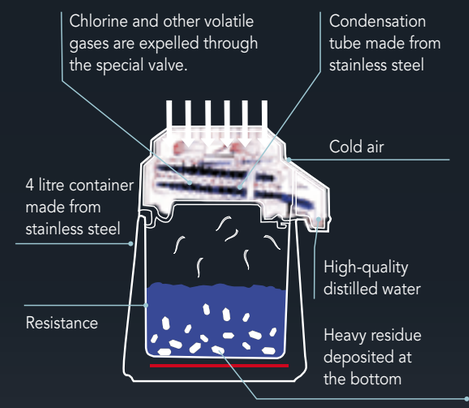
Water purification system

Devices for supplying autoclaves

This is a simple, safe and rational system that ensures optimum quality distilled water, thanks to a boiling procedure with forced recondensation. **The use of Distiller will avoid the purchase and storage of cumbersome water barrels.** Distiller is supplied complete with accessories, filters and other equipment.

The system

All that is required is to fill the internal container of the Distiller with tap water and start the cycle. The temperature increases, reaching approximately 120°C. During this phase chlorine and other volatile gases are expelled through a special valve, while the prolonged high temperature eliminates any micro-organisms or bacteria. The water is transformed into steam, which is soaked up by a special coil that cools it, transforming it into distilled water. Before falling into a special container, the water passes through a filter that eliminates any odours.


Chlorine and other volatile gases are expelled through the special valve.
Condensation tube made from stainless steel
Cold air
4 litre container made from stainless steel
High-quality distilled water
Resistance
Heavy residue deposited at the bottom

Distiller

Diameter	200 mm
Height	360 mm
Weight	3,8 Kg
Main voltage	230V 50/60 HZ
Working capacity	4 litri in 6 ore ca.
Max absorption	580 kW

Ask the expert

Who needs this?

All those who own an autoclave or who use devices that require distilled water.

Why a distiller?

To produce distilled water simply and cheaply, avoiding the purchase of expensive and heavy water barrels.

- Art. 250-S
  Distiller

Frame and click!
Use your mobile phone to get further information about this issue.

See Test B-Test B-Test Plus

Biological control test for autoclaves

Our biological incubator is a product developed for the incubation of biological indicators.
The incubator consists in a frame, an ABS cover, an aluminium heating unit with 3 slots for test tubes/biological indicators and an electronic card for automatic control of heating unit temperature.

B Test

3 phial biological incubator, with spy operation and master switch, with a direct electrical connection to autoclaves mod. EUROPA B Evo - AURA B - ALIA B

B Test Plus

3 phial biological incubator, with spy operation and master switch, connected to mains electricity, 220 V.

See Test

15 phial biological incubator, with spy operation and master switch. Dual temperature selector 37° for ethylene oxide - 57° for steam, connection to mains electricity, 220 V.

Ask the expert

Who needs this?
This can be used by all those who own an autoclave.

Why choose a Tecno-Gaz incubator?
Because they are certified incubators.

B Test:
- with connection to autoclaves Europa B Evo, Aura B and Alia B.

B Test Plus:
- With independent supply at 220 V

See Test:
- With independent supply at 220 V

- Art. 2035-S B-Test
- Art. 2035TS B-Test Plus
- Art. 260/S See Test

Biological test

Use

Used to assess the ability of the autoclave to destroy all micro-organisms including spores. Requires the use of phials of spores and a biological incubator. **The phials must be inserted into the sterilization chamber, even while a load is present. Carry out the cycle. At the end remove the phial carefully as it will be hot and pressurised.** Leave it to cool for approximately 10 minutes then activate it using the forceps supplied, always keeping it vertical. The chemical indicator on the phial's label will change colour from blue to black. Then insert the phial into a biological incubator at 57°c for 48 hours, together with an un-processed phial that has been activated with the special key. We recommended that checks are made every 12 hours for the presence of any bacterial growth.

Response

After 48 hours remove the processed phial from the incubator and assess the response. **If the phial has changed colour to yellow it means that the autoclave has not passed the test and bacteria has grown. If the phial remains purple in colour it means that micro-organisms are not growing** therefore the autoclave has passed the test. The test phial will obviously always change to yellow as it has not been processed, and will only serve as a comparison.

If the test has not been successful, repeat the test and in the event that the response is negative once again stop the autoclave and call an authorised technician immediately.

At the end of the test dispose of the phials as urban solid waste; **we recommend, however, that the phial undergoes a further sterilization cycle at 121°C.**

Ask the expert

What is this used for?
Biological test suitable for all types of steam autoclaves. It is used to assess the ability of the autoclave to destroy all micro-organisms including spores. **Requires the use of spores in phials and a biological incubator.**

Frequency
Recommended **every 90 days.**

- Art. 262/S Pack of 20 spore phials.

Frame and click! Use your mobile phone to get further information about this issue.

Bowie&Dick Test

Physical test for autoclaves that sterilize porous bodies

Use

The test is carried out while the chamber is empty. The **Bowie & Dick** must be placed on the autoclave's central tray. Carry out the relevant cycle, as indicated on the autoclave's display, at the end remove the packet, open it and check the chemical indicator sheet inside to see if it has changed colour.

Art. 269-S
Bowie&Dick, autoclave's test (20 pieces)

Response

The assessment is simple and quick. If the **colour change** is uniform the test has been completely successful, if not the test has failed therefore the autoclave is not able to sterilize porous bodies correctly.

BEFORE THE TEST

SUCCESSFUL TEST

Ask the expert

What are these used for?

Physical test, only suitable for autoclaves that are able to sterilize porous loads. It is used to asses **the ability of steam penetration in porous bodies.**

Frequency

Recommended every **30 days**

Frame and click! Use your mobile phone to get more information about this issue.

Helix Test

Physical test for autoclaves that sterilize hollow bodies

Use

Used to assess the ability of steam penetration in porous bodies. Physical test, only suitable for autoclaves that are able to sterilize hollow loads. The test is carried out while the chamber is empty. In the capsule located at the top of the test insert the special strip, then place the test on the central tray of the autoclave. Carry out the relevant cycle, as indicated **on the autoclave's display. At the end remove the test, open the capsule and check the colour change on the indicator strip.**

Response

The assessment is simple and quick.

BEFORE THE TEST

FAILED TEST

SUCCESSFUL TEST

Ask the expert

What is this used for?

It is used **to assess the ability of steam penetration in hollow bodies.**

Frequency

Recommended every **30 days**

Art. 267-S Helix Test (100 pieces)

Frame and click! Use your mobile phone to get more information about this issue.

Steam Plus and Vaporline

Chemical integrators suitable for all types of steam autoclaves CL.V

Use

Chemical integrators are the most suitable devices for checking steam sterilization, as they interact with all the parameters of the cycle, (pressure, temperature, time) certifying their correct stability.
Chemical integrators should be inserted into the sterilization chamber before the cycle is started, even while a load is present. The integrators can be unwrapped and placed on the trays, or can be inserted into the sterilization wraps together with the material to be sterilized. Inserting integrators into the wraps is a procedure recommended for facilities in which there are several operators as by doing this **the sterilization of every single instrument can be certified.** For small autoclaves we recommend placing three integrators into the chamber: one on the upper tray, one on the central tray and one on the lower tray.

Vaporline type response

The assessment of the result **is quick and easy to read.**

FAILED TEST

SUCCESSFUL TEST

SUCCESSFUL TEST

If the colour change takes place in the green PASS section the test has been successful, otherwise the test has not been successful.

If the test fails, you have to repeat the test end if the result is negative again you have to stop the autoclave an contact an authorized technician.

SteamPlus type response

The assessment of the result **is quick and easy to read.**

FAILED TEST

SUCCESSFUL TEST

SUCCESSFUL TEST

If the colour change takes place in the blue STEAM SAFE section the test has been successful, therwise the test has not been successful.

If the test fails, you have to repeat the test end if the result is negative again you have to stop the autoclave an contact an authorized technician.

Ask the expert

What are these used for?

Tests suitable for all types of autoclaves. They are used to assess the ability of colour change in the autoclaves through the parameters of the machine time temperature - pressure.

Frequency

Recommended **once a day.**

Art. 200-S
Vaporline integrator
Pack. 100 pcs.

Art. 216-S
SteamPlus integrator
Pack. 100 pcs.

Sonocheck

Ultrasonic tubs control system

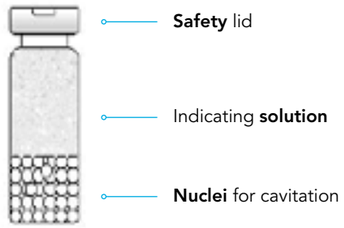
Why SonoCheck?

Ultrasonic tubs are a decisive instrument in the entire sterilization process, in fact, they "manage" the cleansing phase, which takes priority in the entire process. **Checking this important device is therefore decisive for every facility. Today it is possible with SonoCheck,** the first independent system able to perform **two types of test:**

- **operation test:** able to certify the ability of the removal of organic liquids, including blood on materials.
- **equipment assessment test:** able to assess the energy supplied, the correct water level, and above all, the occurrence of the phenomenon of cavitation.

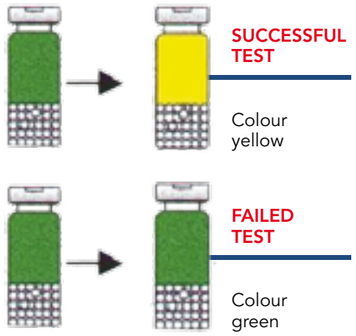
Use

- Place the SonoCheck phials in the grill of the ultrasonic machine.
- Proceed with a washing cycle as a protocol adopted by the surgery.
- At the end of the cycle check the colour of the phials.



Response

The change in colour from green to yellow signals a positive outcome for the test . The time necessary to obtain the colour change provides further indications with regard to the ultrasonic energy (average test for reference in max. 15 minutes). Record the results obtained on the test routine card.



In the event of serious problems **SonoCheck will not change colour at all.**

In the event of unsatisfactory results refer to the Operational Anomalies Guide (provided by Tecno-Gaz)

Ask the expert

What are these used for?

To certify the ability to remove organic liquids, including blood on materials. **To assess the energy supplied, the correct water level, but above all if the phenomenon of cavitation has taken place.**

Art. 261S
Sonocheck
(pack of 30 phials)

Frame and click!
Use your mobile phone to get further information about this issue.

Frequency

There is no specific rate according to regulations, but we recommend using it **at least every 15 days.**

Sealcheck

Control system on the sealing machines

Frequency
Recommended every **30 days**

Art. 266S
Sealcheck
(pack of 12 pieces)

Frame and click! Use your mobile phone to get further information about this issue.

Why Sealcheck

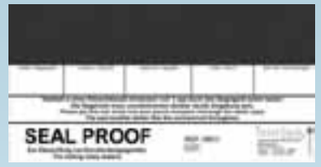
It's essential to maintain the sterility of instruments. For this reason the sterilization paper should be good quality paper, and most of all the sealing should be continuous, correct, and uniform. **This control is possible using a simple test called SEAL CHECK that can certify the validity of your sealing machine.**

Use

SEALCHECK must be placed between the paper and the plastic of the wrap, then inserted underneath the sealing bar, before carrying out a normal seal. **The seal will be seen on the test paper and the operator can check the result obtained.**

The result

If the black sealing band is incomplete, the test has failed and the sealing machine **needs a technical control.**



SUCCESSFUL TEST

If the black sealing strip is uniform, without any gaps, the test has been successful and the seal allows for the correct and long-lasting maintenance of the instruments.

FAILED TEST

If the black sealing strip has "gaps", the test has failed and the sealer needs to be checked by a technician.

TDS (total dissolved solids)

Hard water control system

Frequency
Recommended every **30 days**

Art. 263S

Controlling the water supplied by the mains to dental surgeries, in terms of the total dissolved solids it contains. This starts from the assumption that **H2O with TDS below 30** can only come from high mountain springs or has been through osmosis and is therefore purified from salts, pollutants, bacteria and viruses. Such a complete purification cannot be **obtained through any other method of filtration.**

Use

With a TDS gauge immersed in a completely clean container, on pressing the upper button, a reading of the total dissolved solids in the water can be immediately obtained.

Response

Depending on the location, drinking water from the national mains supply can go from a TDS of 150 to 900/1000 (total dissolved solids). As mentioned above, **the ideal water TDS for a dental surgery would be no higher than 30-40, while autoclaves need a TDS between 0 and 5.**

29.0 - SUCCESSFUL TEST for surgery water

04.0 - SUCCESSFUL TEST for surgery water

31.0 - FAILED TEST

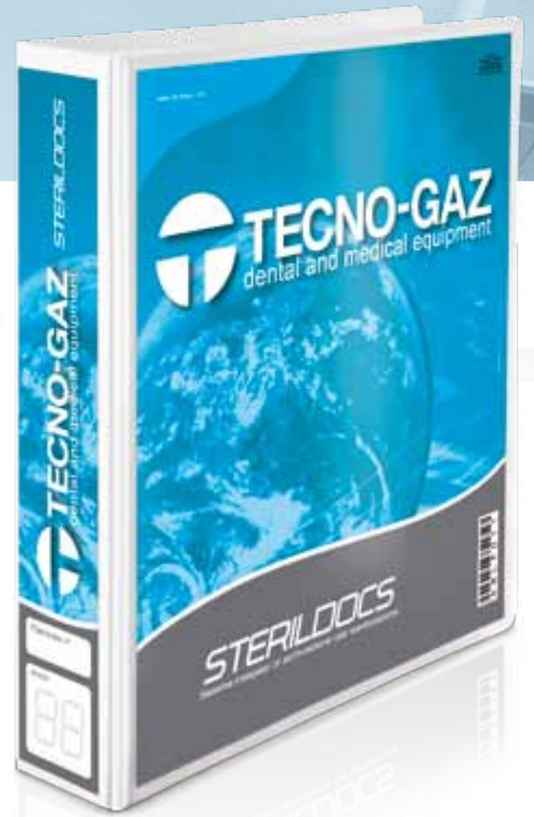
SterilDocs

Archiving system

Sterildocs is a container featuring the following sections:

- DVD-operating protocol support section
- Written protocol instruction section including sterilization tests
- Practice and equipment data sheet section
- Section where all the practice and autoclave data are recorded. The paper used is watermarked and does not allow any modifications or corrections
- Filing section. The filing section is divided into sectors and is identified by a specific graphical structure that enables user-friendly filing of each test providing evidence for data, cycles, etc..

Filing is simple, rational and orderly and allows you to manage all the tests of each autoclave in an organized way.



Sterildocs is the result of a study based on Tecno-Gaz's experience. This instrument is very flexible, inductive and rational. The initial concept is very interesting, as **STERILDOCS teaches the operator constant regularity and an organised method, ensuring a continuous use of control tests.**

Ask the expert

Who needs this?

All operators who own an autoclave.

Why an archiving system?

An archiving system serves to manage all tests carried out in an organised way, facilitating the work of the operators in charge. This system also allows for availability during the time that the test is being carried out. An organic, rational and ordered method.

Art. 280-S
SterilDocs

Frame and click!
Use your mobile phone to get further information about this issue.

Sterilization furniture

Suitable for large sized autoclaves.

Compact Plus

Furniture for sterilization, ergonomic with a top where an autoclave can be positioned and three shelves. It can obviously be used **for all types of autoclave.**

Compact Plus

Width	510 mm
Height	850 mm
Depth	600 mm
Weight	53 Kg

Steril Compact

Furniture for sterilization with compartment for autoclave, compartment for thermosealing machine with sliding table, compartment for trays with relative support, drawer hold-objects. **Rational and practical, Steril Compact is designed for Tecno-Gaz equipment.**

Steril Compact

Width	600 mm
Height	1800 mm
Depth	520 mm
Weight	80 Kg

Ask the expert

Who needs these?

They are indispensable for medical and dental surgeries.

Art. 2032-S
Compact Plus

Frame and click!
Use your mobile phone to get further information about this issue.

Art. 2025-S
Steril Compact

Frame and click!
Use your mobile phone to get further information about this issue.

Sterilair PRO

Device for air sterilization

Airborne contamination

Airborne contamination has always been a serious problem in our society, in fact, many diseases are transmitted through airborne pathways. Meningitis, diphtheria, tuberculosis, measles, rubella, mumps, right down to simple flu, colds and the new forms of flu that have arisen over the last few years, such as bird flu and swine flu.
In some environments airborne diffusion is particularly critical, normally we think of all those environments where there is a **high concentration or turnover of people (public places, meeting places, schools, nurseries etc.),** or healthcare or surgical environments. Some healthcare environments take on even more critical importance, for example dental environments, **where the sprays and ultrasonic cleaners used create a greater diffusion** of micro-particles that are then carried into the environment. All these infections are becoming more and more wide-spread, so much that in some cases they are even defined as pandemics, which can cause high costs and considerable social problems. **The use of environmental sterilizers finds an immediate use within healthcare to reduce the risk of the transmission of airborne viruses,** on the basis of the recommendations outlined by the CDC (Centers of Disease Control and Prevention), but **such devices can also be used in all environments.**

Controlled ultraviolet radiation

There are various ways of decontaminating air, for example free ultraviolet radiation, chemical methods that use iodoforms, clorexidine and quaternary ammonium nebulized with the appropriate equipment. **Although considered effective, these techniques have a temporary effect, in fact they are of no use in moments when the operator is absent and they are in a completely inactive state. The most suitable and absolutely most efficient method is certainly the use of ultraviolet radiation at controlled wave-lengths.**

This has an intense microbicide function in the face of numerous micro-organisms. This acts by blocking the reproductive capacity of the micro-organisms by altering their chromosomes. No micro-organisms exist that are immune to germicidal radiation: spores, bacteria, mould, yeasts are eradicated by this radiation, even viruses undergo the destruction of their DNA. **The great advantage of our system lies in its absolute lack of danger (as certified) to man due to the minimal leakage of UV-C radiation from the unit.**

Ask the expert

Who needs this?
All dental and medical surgeries.

Why SterilAir PRO?

- It reduces the risk of operator contamination, **as required by the Consolidated Safety Act.**
- **It reduces or eliminates costs and loss of earnings,** as a result of long absences due to illness.
- It reduces or **eliminates risks to patients** and the population as a whole.
- It provides a **bacterialogically pure environment.**

- Art. 210S SterilAir Pro - Wall mounted version
- Art. 212S SterilAir Pro - Stand mount version

Frame and click! Use your mobile phone to get further information about this issue.

SterilAir PRO

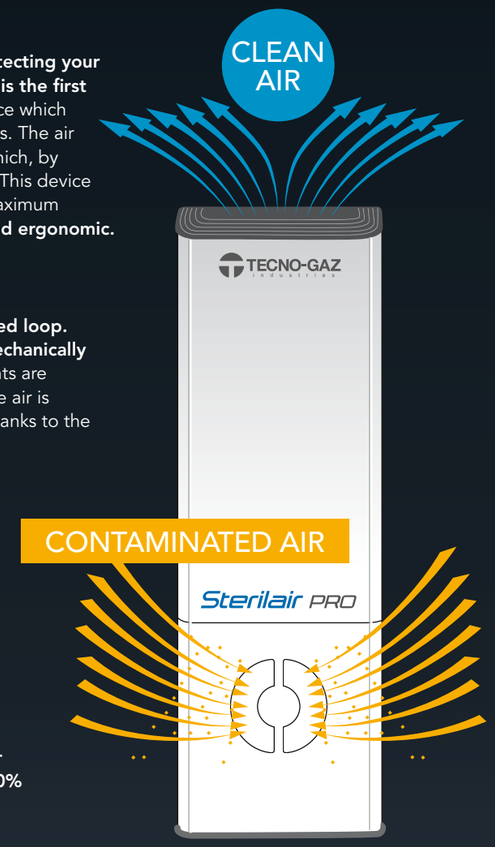
Safeguard your professional image and your prestige, by protecting your health and that of you colleagues and patients. SterilAir PRO is the first air sterilization system. SterilAir PRO is an air sterilizing appliance which guarantees the elimination of all microorganisms including spores. The air is transported into the sterilization chamber inside the device, which, by irradiation eliminates the entire microbial load present in the air. This device can run continuously also in the presence of people, ensuring maximum safeguarding of the operators. **SterilAir PRO is simple, silent and ergonomic.**

Functioning

Its functioning is based on a system of forced ventilation closed loop. The air drawn into the module first passes through a filter, mechanically positioned, within the inlet entrance. Here the coarser pollutants are blocked, preventing the fouling of the germicide lamps. Then the air is forced to pass in direct contact with mercury vapor tubes that, thanks to the emission of the UV-C, carry out the maximum germicidal action.
The high reflectivity shielding action of the housing concentrates the reflections of the UV-C radiation. The air is subsequently expelled through the nozzle output, thus leading to an effective microbial killing.

The system

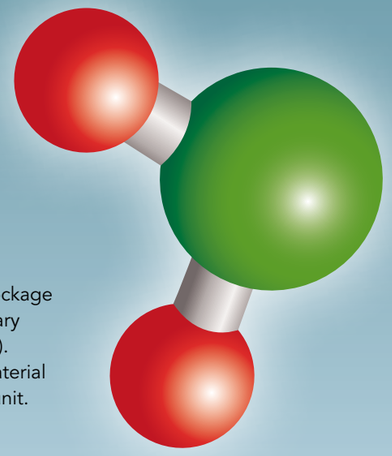
The great advantage consists in the absolute lack of danger for the operator since there is the minimum emission of UV-C radiations from the unit. The device can effectuate a continuous air disinfection treatment (120 m3/h). **It's possible to carry out a demolition of microbiologic pollution of the air in every room, during every productive phase without any damage for operator's health. After about three hours from installation 90% of demolition of bacterial charge in the air.**



SterilAir PRO

Width	18 cm
Height	125 cm
Depth	8 cm
Weight	7 Kg
Mains voltage	230V 50 Hz
Power absorption	110 W
Air capacity	100 m^3/h
Operation	Continue
Wavelength	254 nm
UV-C tube substitution	8000 hours (1 year)
Equipment	Pre –filter inside aspiration vent Air vents not against the current
Lamp	n.4 UVC tubes 25W - T8 G13 Philips TUV (7 W UVGI)
Structure	Alluminio UVC riflettente
UV-C rays external output	none
Danger	none
Ozone output	none
Colour	Natural and anodized
Installation	Wall mounted

Devices for water disinfection



Why a device for water disinfection in the unit and the studio:

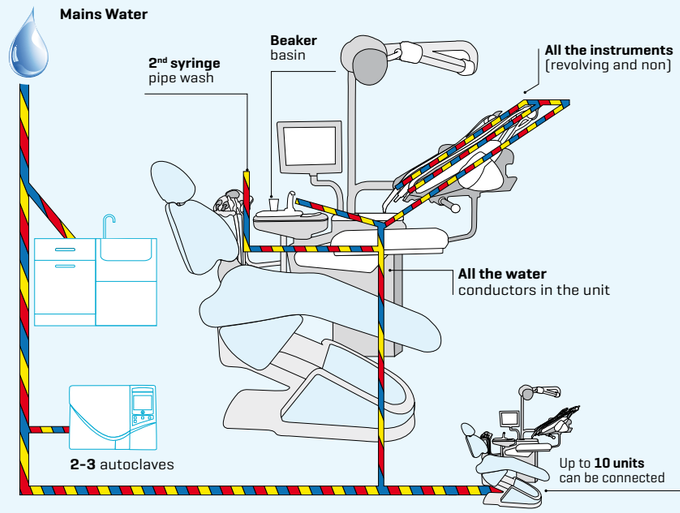
The problem of contaminated water in the dental unit can cause structural and biological damage. Calcareous water scales up conductors and goes on to create a blockage that can cause unpleasant machine stoppages and therefore harm costs due to temporary inactivity, as well as repair costs (damage to revolving instruments and unit components). Another big problem that is closely linked is turbine back-flow that can let in organic material that has been potentially infected, from the mouth of the patient to the running of the unit.

Water in the dental studio

Water is an indispensable element in the dental environment because it is used constantly in devices that are used every day.

- **The dental unit receives water from the mains water supply, but this is often rich in unwanted substances such as nitrites,** heavy metals, inorganic salts, that can precipitate the formation of limestone obstructing various components of the unit (solenoid valves, scalers, syringes, turbines and micro-motors). **It is also important to eliminate bio-film both from inside the water conductors of the unit and inside those of the network,** this avoids the nesting of bacteria, which over time can become resistant to the action of disinfectants.
- During the procedures of the sterilization cycle **water plays an important role in cleansing and rinsing instruments and materials.** Untreated water retains the surfactants from liquid detergents and causes oxidation due to the calcium carbonate.
- **Water is used to supply the autoclaves, which must used distilled water,** or water treated with an osmosis filtration system. This is to avoid onerous repair and maintenance costs due to incrustations.
- Water is used for other daily activities and **its "purity" improves its action in every case.**

PROBLEMS



Problem 1

Damages caused by bio-film

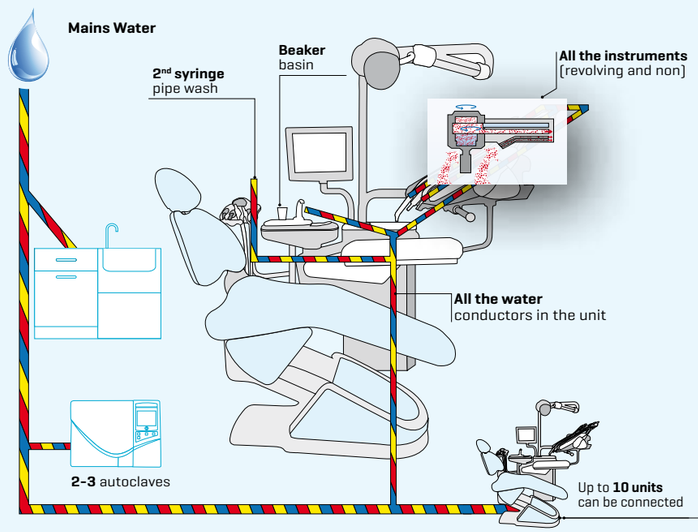
Any material can come under attack from micro-organisms and, as a consequence, can be modified or destroyed. These modification are caused by various micro-organisms such as unicellular algae, bacteria and fungi. **In the particular case of the system of the unit, bio-film causes a dangerously contaminating bacterial deposit and the bacteria nestled in this can become resistant to various disinfectants.**

LEGEND

H_2O - Mains water supply to the surgery

Inorganic components

Organic components



Problem 2

Biological contamination: turbine back-flow problems

Turbines are high-speed revolving instruments and during their slowing-down phase they have a centrifugal suction effect that causes organic material present on the tip of the instrument to be taken inside. For this reason, revolving instruments are fitted with special valves with the task of keeping the material sucked in inside the rotor.

LEGEND

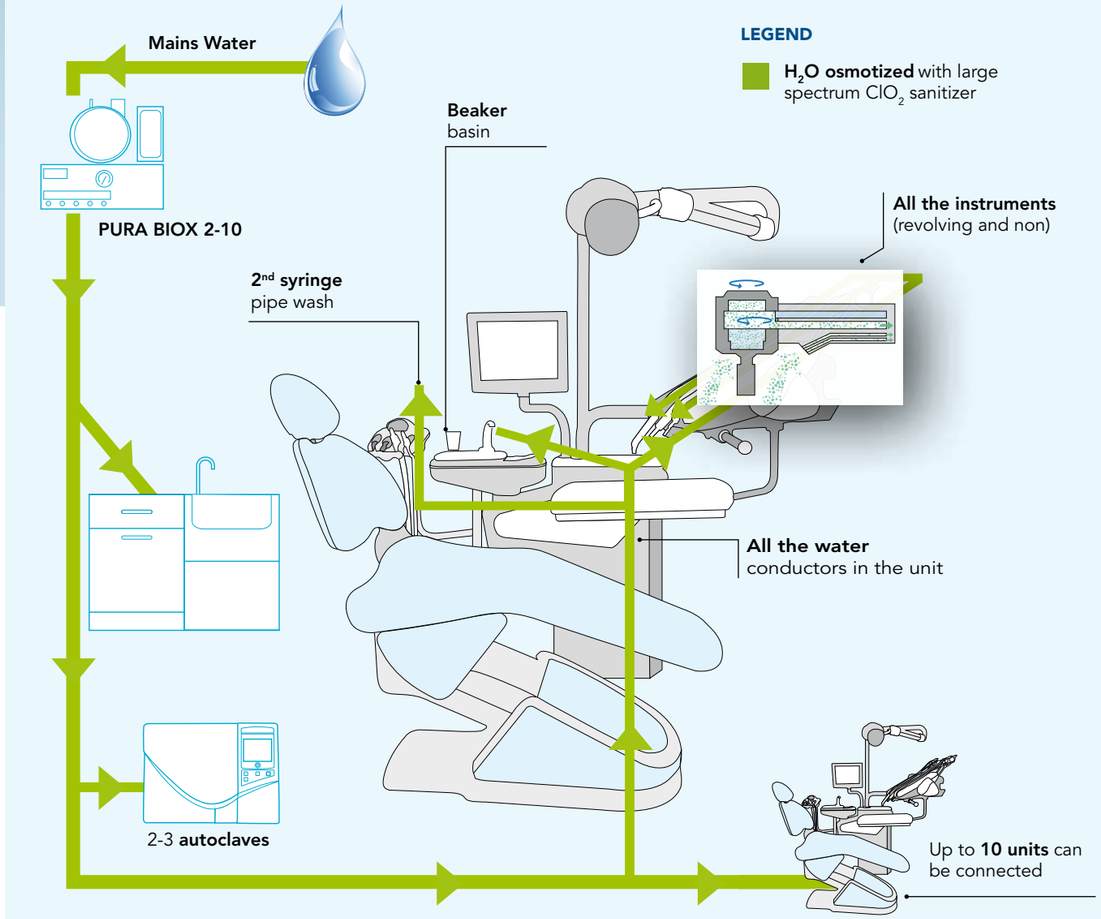
H_2O - Mains water supply to the surgery

Inorganic components

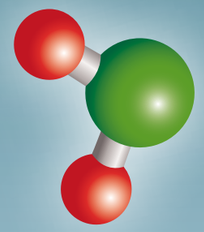
Organic components

SOLUTION

with the Pura 2 Biox or Pura 10 Biox system



Pura 2 - 10 Biox



Centralised inverse osmosis and disinfection filtration systems with Chlorine Dioxide

Treatment of water with an inverse osmosis system

This is the safest and most wide-spread water treatment system in the world: this process, in fact, allows for the elimination of polluting particles of even the most infinitesimal dimensions (up to a ten thousandth of a micron, including viruses, bacteria and general impurities) thus guaranteeing its absolute purity.

Chlorine Dioxide (ClO2)

The treatment of water in the dental and medical environment is an activity of vital importance therefore the solutions used must be effective, tested and scientifically recognised. The most well-developed and recognised system of biological and bacteriological treatment in existence today is undoubtedly the emission of chlorine dioxide into the water in controlled quantities. A wide range of scientific and technical documentation is in existence about this substance, which appears to be the most effective, compatible and ecological. **Using a water treatment system with devices that supply a dose of chlorine dioxide, means opting for the safest solution.**

Pura 2 - 10 Biox

Devices for the treatment of water by inverse osmosis, complete with a system for biological treatment with Chlorine Dioxide, BIOX model. **Thanks to their osmotic membrane, these devices are able to remove all the organic and inorganic particles in the water as it enters, eliminating limestone.** Thanks to the chlorine dioxide, they automatically provide, without the machine needing to stop at all, the disinfection of all the water circuits of the unit, also **eliminating the possibility of the formation of bio-film.**

Pura 2 - 10 Biox

Width	428 mm
Height	210 mm
Depht	430 mm
Weight	13,5 Kg
Main voltage	230V 50/60 HZ
Max. power absorption	165 W

Ask the expert

Who needs this?

All **dental surgeries.**

- Art. 246S2BIOX Pura 2 Biox
- Art. 246S10BIOX Pura 10 Biox

Tecno-Gaz solutions

The range of devices for water treatment mod. Pura includes four high performance solutions:

Pura 2:
- To supply up to two units, one autoclave and 1 one extra tap on the sterilization sink.

Pura 10:
- To supply up to ten units, two autoclaves and one extra tap on the sterilization sink.

Frame and click! Use your mobile phone to get more information about this issue.

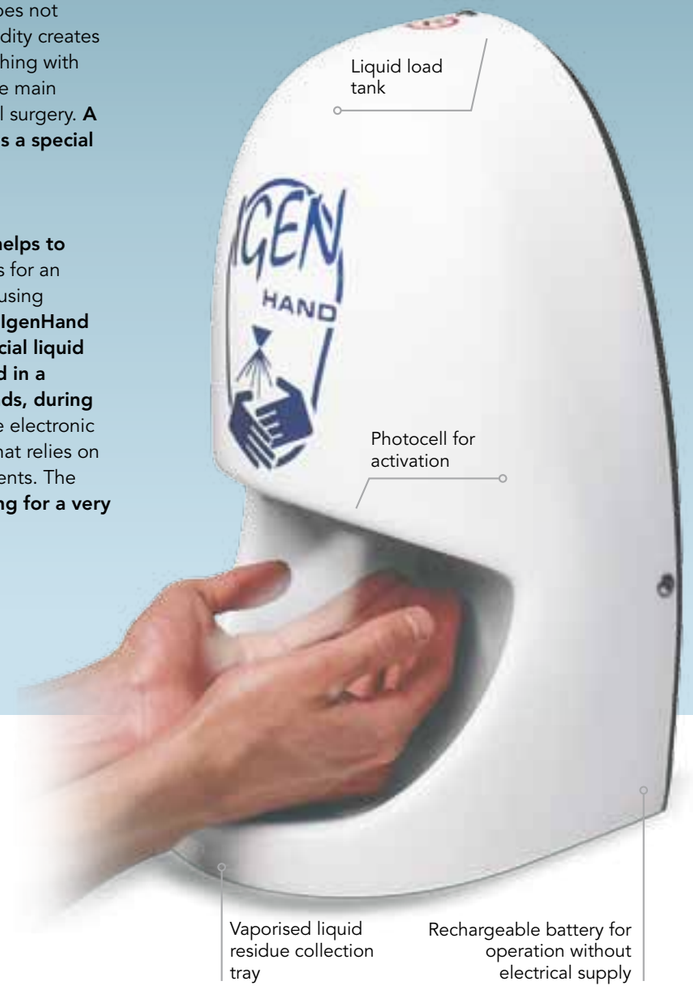
IgenHand

Hand disinfection device

Why a hand disinfector?

The hands are the principal means of transmission of crossed infections, even the use of gloves does not eliminate this problem, on the contrary the humidity creates a marked proliferation of the bacterial load. Washing with antiseptic soaps and constant disinfection are the main protective barriers to be adopted in every dental surgery. **A system of automatic disinfection that nebulizes a special liquid is an indispensable and very useful device.**

IgenHand is an extremely useful device, that helps to rationalise hand disinfection. This device allows for an optimum disinfection to be carried out, without using levers, buttons, gels or liquids to be rubbed on. **IgenHand is a device that has to be pre-loaded with special liquid disinfectant, which is then finely vaporised and in a thorough and wide-spread way across the hands, during** the moment in which they are inserted under the electronic control sensor. IgenHand is a complete device that relies on well-researched solutions for use in all environments. The vaporisation of the liquid is micro-metric, **allowing for a very thorough disinfection and rapid drying.**



IgenHand

Time of vaporization	3,5 sec.
Feeding voltage	12 V
Working voltage	12 V
Tank capacity	1000 cc
Power absorption	20 W
Weight	5 Kg

Ask the expert

Who needs this?

All dental and medical surgeries.

- Art. 2044-S IgenHand

why IgenHand?

- Ergonomic, **practical and functional** system
- IgenHand nebulizes the liquid micro-metrically ensuring maximum **penetration and rapid drying**
- **IgenHand does not have cables and connections,** and can be placed anywhere
- It is managed by an **electronic control**

Frame and click! Use your mobile phone to get more information about this issue.

Orma

Device for surgical shoe covers

Tecno-Gaz S.p.A is proud to launch ORMA a new extraordinary and unique automatic device revolutioning the concept of shoe insulation. ORMA is an automatic device that creates a shoe cover, by using a thermoretractable film and assuring a great number of practical, technical and economic advantages. This is an essential device for all medical surgeries and facilities.

Surgical protocols impose the usage of DPI (individual protection devices), which have to be used by operators and by patients. Protective shoe covers are essential for surgeons and supporting staff people who are obliged to insulate shoe covers which could "transport" infective materials. Even patient should be equipped with protective devices as shoe covers. **The shoe covers mounting is very simple considering that it should be used also by sick people.**

Easy to use

Wearing shoe covers manually or using devices that require special operative attentions are activities and situations that discourage the adoption of this important protective barrier. **ORMA is simple, quick, doesn't require any attention and is immediate, so it simplify and boost the procedure of adoption of shoe covers.**

Strong hygiene image

To adopt the procedure of wearing shoe covers as standard for operators and patients means a great attention to hygene and protection. This generates a positive perception of patients and reduces microbic spread in surgical and operative areas. **ORMA facilitates the management of this procedure, reduces risks and costs and increases the image of the structre.**

Ask the expert

Who needs this?

All dental and medical surgeries.

Why Orma?

- Protective shoe covers are essential for surgeons and supporting staff people who are obliged to insulate shoe covers which could "transport" infective materials.
- **Easy** to use
- Strong **hygiene image**

- Art. 2900S Orma
- Art. 2910S Orma support

Frame and click! Use your mobile phone to get further information about this issue.

First Step
Step your foot on the special space.

Second Step
Leave the foot till when the film will completely wrap the lower part of the shoe.

Third Step
Relieve the foot (in case you can lean on the optional support that helps to maintain the balance).

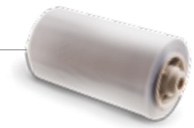
ORMA "builds" automatically the shoe cover; In fact, by placing the shoe in the space where the thermoplastic film is, the heating system activates creating in real time shoe cover following the shoe configuration. The cover is so perfectly enveloping that insulates the shoe by creating a perfect protective barrier. The shoe is also impermeable and does not create obstacles to movements. The shoe cover is in plastic, therefore it guarantees higher life compared to those in other tissues.

ORMA i san elegant and technological device controlled by a microprocessor board, with programmable controls and commands. The cycle of film spread and the creation of shoe cover is carried out by entering the foot inside the special footprint on the machine.

A special support (optional) art. 2910S has been designed as holder to maintain one's balance during the phases of preparation and take off of shoe covers.

Accessories

Reel shoe
Art. 2912S



Orma

Width	800 mm
Height	445 mm
Depth	330 mm
Weight	21 Kg
Level Over Ground	20 mm
Film-feeding Time	4 sec.
Shaping time	2 sec.
Power max.	1300 W
Start Preheating Time	3 min.
Voltage/Frequency	22 0±5%V 50Hz
Hot Standby Power	75 W
Highest temperature of Heater	250°

Orma support
Art. 2910S

Orma device
Art. 2900S

Firtst Aid

in the dental environment

The greatest danger in dental emergencies is not being properly equipped

Diagnosis

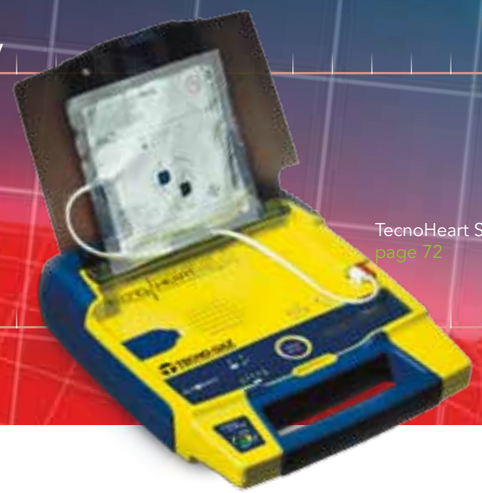
Vital Test
page 66

Monitor MD
page 68

Oxygen therapy

Air Ox
page 70

Defibrillation



TecnoHeart S
page 72

TecnoHeart A
page 73

First Aid

The first aid project

Tecno-Gaz S.p.A has set up the first aid project. A complete programme that helps you to organise your facility, making it more efficient, compliant and ready to face any emergency. In outpatient medical facilities it is a duty and an obligation to organise emergency plans with instruments and devices suitable for ensuring adequate first aid. Basic professional equipment must include:

- Semi-automatic AED defibrillator
- Multi-parameter and saturimeter monitor
- Resuscitation kit
- Medicines

Protect your facility

First aid products are life-saving devices, therefore equipping yourself with these items is a legal, ethical and professional duty. Having knowledge, medication and emergency devices also means **protecting yourselves,** your reputation and that of your profession, as well as **being ready and prepared** to save a person's life.

Overall project

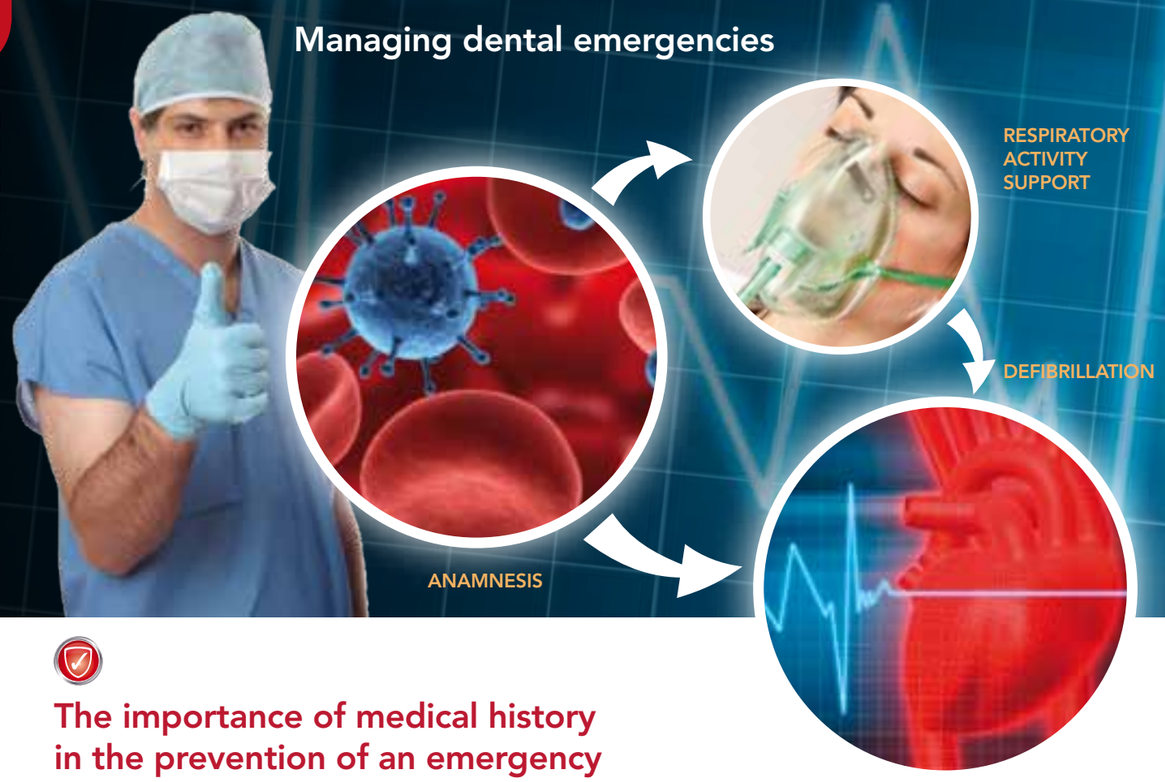
Tecno-Gaz S.p.A. is not offering you first aid devices, but rather **a programme and a project that is well-designed and suitable for a dental surgery.**
The devices and solutions are the result of careful operational analysis, carried out by specialists and professionals in the field. Choosing a Tecno-Gaz device means setting out on an organic and complete path to safety.

Publications

- Book "The Medical Emergency in a Dental Surgery"
- Special "First Aid in the Dental and Medical Environment"

First Aid

Managing dental emergencies



Tecno-Gaz first aid project

A complete programme that helps you organise your facility making it more efficient, compliant and ready to face any emergency. In outpatient medical facilities it is a duty and an obligation to organise emergency plans with instruments and devices suitable for ensuring adequate first aid. Basic professional equipment must include the following:

- **SEMI-AUTOMATIC AED DEFIBRILLATOR**
- **MULTI-PARAMETER AND SATURIMETER MONITOR**
- **ELECTRONIC NEBULIZER**
- **RECOVERY KIT**
- **MEDICINES**

Tecno-Gaz S.p.A. is able to provide you with all of these, as well as support services, training and information for your employees.

First Aid

The importance of medical history in the prevention of an emergency

The skill of every doctor and dentist is listening to patients and allowing them to give as much information as possible in order to manage their care in the best way. A correct medical history must be completed along with an overall evaluation of the patient, through his words behaviour and posture. A medical history is a complex analysis that we can, however, outline in 3 main areas of interest:

Current state of the patient

- age
- known risk factors
- any illnesses being experienced
- known allergies or reported allergic reactions
- therapies or cures being undergone
- possible pregnancy

Previous history

- any hospitalization and causes thereof
- problematic episodes experienced
- illnesses experienced

Reason for the visit

- evaluate the reasons for the visit
- evaluate the patient's expectations
- evaluate the patient's needs

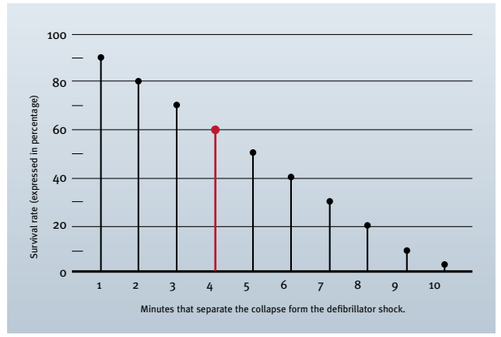
Respiratory arrest

Respiratory arrest is the arrest of the ventilatory function followed by anoxia. A patient in respiratory arrest rapidly loses consciousness and is deprived of respiratory activity in total apnoea or in extreme bradipnoea with isolated acts of noisy respiration, inefficient for maintaining appropriate blood oxygenation, while a pulse is present and usually tachycardic. Generally speaking, an intense cyanosis rapidly develops. If not stopped, respiratory arrest transforms into cardiac arrest in the space of a few minutes due to the depletion of oxygen still present in the blood and in the cells.

In the dental surgery, respiratory arrest is usually a peripheral problem, in particular for glottic oedema, for bronchial asthma attacks or for re-heightened obstructive chronic broncopathy. It can also be assumed that the upper respiratory tract may be blocked by a foreign body. It is less likely that central respiratory arrest has occurred due to iatrogenic-toxicology, hypoglycaemia, local anaesthetics, opiates or benzodiazepine.

Cardiocirculatory arrest in dentistry

Nowadays the dental surgery is an environment in which sophisticated and highly invasive micro-surgical operations and therapies are carried out, even on elderly patients, and on many subjects who are anxious and stressed and who may have extremely negative reactions. For these reasons organisation of emergencies is a very important ethical and legal priority. **Intervention must be timely** and a request for specialist help from the nationwide 118 emergency medical service (Italy) must be immediate. The principal emergency pathologies can be made evident through the cardio-circulatory apparatus in the cases of:



- Systemic toxicity to the local anaesthetics and vasoconstrictors
- Fainting
- Hypotensive crisis
- Cardiac arythmia
- Angina pectoris
- Acute myocardial infarction
- Acute pulmonary oedema
- Cardiac arrest

Mobile CMS page 73

What more can Tecno-Gaz offer you?

Information
- Educational texts
- Information publications
- Conferences

Products
- A complete range of high quality products

Training
- Certified courses for physicians and assistants specifically for the dental industry.

Vital Test

Pulse oximeter indicating the situation of anoxia

The control of the functions and vital parameters of every patient during treatment interventions or outpatient surgery is a focal aspect for every professional. **Nowadays, non-invasive systems** and devices exist that allow for rapid and safe monitoring, ensuring the control and protection of the patient. The basic instrument that all dentists and doctors in general must adopt is **the pulse oximeter, an indispensable, cheap and precise device.**

VITAL TEST is a professional pulse oximeter that is designed for use in a dental environment. Simple and multi-functional it can be supplied with a special support, designed to be fixed to a unit, wall or stand. This option allows for constant control of the instrument and allowing it to become a convenient instrument for constant use.

LCD wide display allows easy reading even at long distance, and it is also equipped with a control useful to activate or to remove retrolighting in order to make it readable with all light conditions.
Despite visualizing basic parameters it also visualizes battery level and alarms.

Settings are the following:

- wave visualization or value decimal reading
- adults and children reading selection
- on/off sound and adjustable volume
- SpO2 min/max alarms
- pr min/max alarms
- patient's identification
- data reading
- volume pulsation

Principal Characteristics

- wave-length or decimal reading of the values on the display
- adult-child reading selection
- on/off sound and adjustable volume
- SpO2 min / max alarms
- Pr min / max alarms
- patient identification
- data reading

On request **Vital Test can be supplied programmed with an interface to be connected to a computer,** for the registration and printing of all parameters measured.

Ask the expert

Who needs this?

All medical and dental surgeries must be equipped with a pulse oximeter as a basis for monitoring the patient.

Why Vital Test?

For the monitoring of vital parameters, such as oxygen concentration in the blood, heartbeat and frequency. In the event of a loss of oxygen, the basis for allowing cells to live, the equipment determines an emergency 60/90 seconds early.

- Art. 11240 Vital Test
- Art. 11255 Unit support

Frame and click! Use your mobile phone to get more information about this issue.

Photo gallery

Vital test with shoulder bag case that is easily transportable.

Vital Test sensor

Vital test with support

Vital test can be supplied with a special support Art. 11255 designed to be fixed to a unit, wall or stand. This option allows for constant control and view of the instrument making it a convenient instrument for constant use.

Vital test

Width	70	mm
Height	158	mm
Depht	37	mm
Weight	5	Kg
Feeding voltage	110/120	V
	50/60	Hz
Batteries power supply	4 x 1.5V LR6 AA 16 hours life-span	
EMC Compliance	Class B	
Degree of protection	Type BF-A Type BF-Applied Part	
Display	128 x 64 dot-matrix LCD with LED backlight	

MD Monitor

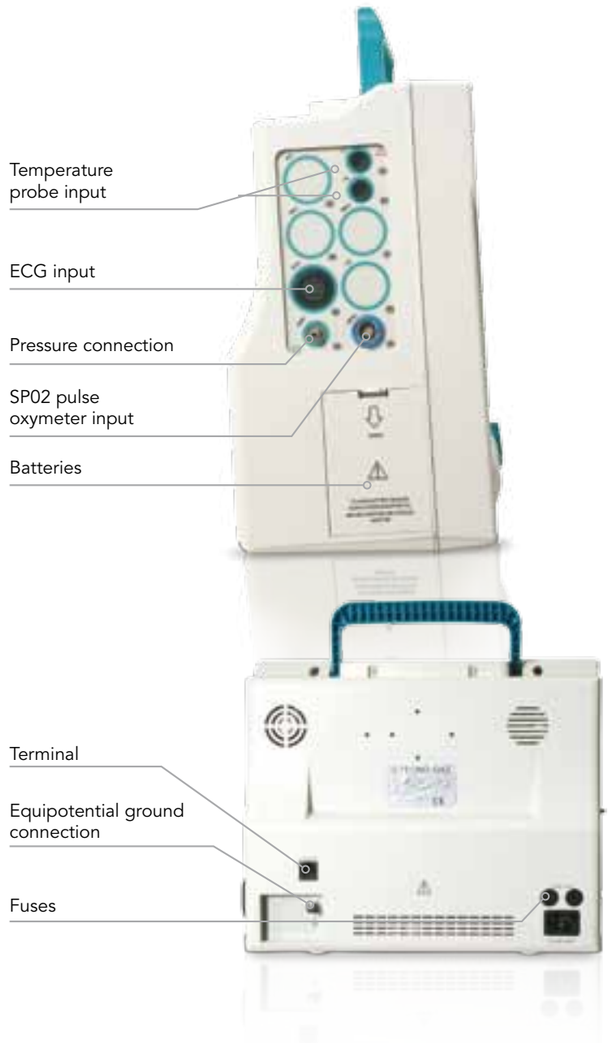
Electronic multiparameter monitor

Advanced Diagnostics

Tecno-Gaz's MD monitor is a professional instrument with many operational and memory functions, fitted with accessories and circuits. The monitor has a **dual function: diagnosis and monitoring.** Allowing the **measurement of various vital parameters,** which can be measured singly or at the same time.

Here are some of its functions:
- **Multiparametric monitor, with numerical and trace display.**
- **Operates with a battery or from the mains**
- **Complete with built-in printer**
- **Outlet for mains connection for remote management**
- **Adjustment and set-up of parameters**
- **10 inch monitor**

5 Parameters:
- **ECG 5 channels 2 traces**
- **Systolic/diastolic/average pressure**
- **Heartbeat**
- **Pulse oximeter**
- **Respiratory control**
- **Dual sound temperature**



Arrhythmia review

Display of waveforms in real time and of vital signs with priority formulation, during and after the presentation of arrhythmic events.

Graphic trends

Clear review of stored information with access to 72 hours of graphic trends of all the parameters and 40 seconds of full disclosure waveforms.

Who needs this?

Designed for surgeries able to satisfy needs linked to dental emergency.

Why a multiparemeter monitor

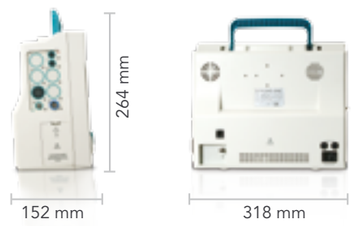
Diagnostics: can be used during the anamnesis, the monitor includes a DVD with a printable patient sheet.
Monitoring: the monitor is the higher technical and technological expression that assures precision, safety and a "strong quality of professionalism perceived".

Art. 903325
Monitor MD

Frame and click! Use your mobile phone to get more information about this issue.

MD Monitor

Width	318	mm
Height	264	mm
Depth	152	mm
Weight	5	Kg
Feeding voltage	100/240	V
	50/60	Hz



Accessories

Temperature probe
Art. SMMA010

5-lead ECG guide
Art. SMMA014

Pulse oximeter sensor
Art. SMMA011

Equipotential ground connection
Art. SMMA016

Pressure detection extension
Art. SMMA013

Connections

Disposable ECG electrodes
Art. SMMA017

Pressure measuring cuff
Art. SMMA012

Oxygen therapy

Air Ox

Resuscitator with oxygen cylinder

An important device as oxygen forms the basis for keeping cells alive. The cylinder guarantees supply for up to 1 hour with 15 litres per minute. The cylinder must have a minimum of 5 liquid litres (1,000 litres of gas).

Tecno-Gaz can provide the AIR-OX resuscitator fitted with:

- **an oxygen cylinder with 5 litres** (1000 litres of gas) **complete with an adaptor and litre dose measurer**
- **oxygen therapy mask**
- **resuscitation balloon** with mask
- **various accessories** (mouth-opener, tongue-puller, Guedel pipes, tubes).

Why a resuscitator?

Oxygen is fundamental for keeping cells alive and must be administered in situations in which its concentration reduces due to insufficient respiration. Oxygen is indispensable in any emergency, therefore every facility must be equipped with suitable equipment for appropriate administration.

An outpatient resuscitation kit must have specific characteristics:

- refillable cylinder with at least 1000 litres of gas supplying at least 60 minutes with a flow of 15 lt/min.
- adaptor with dose measurement supply
- CE marked reusable and autoclavable accessories

Air Ox

Width	350	mm
Height	680	mm
Depth	170	mm
Weight	11,5	Kg

Ask the expert

Who needs this?

All dental surgeries must be equipped with a resuscitation/ oxygen therapy system for the controlled administration of therapeutic oxygen.

Why Air-Ox?

Oxygen is indispensable in any emergency, therefore every facility must be equipped with suitable equipment for appropriate administration. **A flexible, practical and well-designed product for use in an outpatient environment.**

Art. 3003-E
Air-Ox

Frame and click!
Use your mobile phone to get more information about this issue.

Speedy 2

Resuscitation set

Speedy 2 is resuscitating set complete with:

- **0.5 LT rechargeable** steel bottle for oxygen
- **reducer** with manometer and dosing unit
- **reanimation bag**
- **reanimation mask,**
- **2** Guedel **canulas**
- tongue **puller**
- helicoidal **mouth opener**
- **tube**, in unbreakable plastic container.

Speedy 2

Width	440 mm
Height	110 mm
Depth	320 mm
Weight	3,8 Kg

Ask the expert

Who needs this?

All dental surgeries must be equipped with a resuscitation/ oxygen therapy system for the controlled administration of therapeutic oxygen.

Why Speedy?

Oxygen is indispensable in any emergency, therefore every facility must be equipped with suitable equipment for appropriate administration. **A complete, practical and well-designed product for use in an outpatient environment.**

Art. 3007-E-2
Speedy 2

Frame and click!
Use your mobile phone to get more information about this issue.

TecnoHeart

Automatic and semiautomatic defibrillators

Defibrillation

The defibrillator line has 2 models:

- **TecnoHeart S (semiautomatic)**
- **TecnoHeart A (automatic)**

The semiautomatic TecnoHeart S system
The AED defibrillators currently on the market are mainly semiautomatic.They supply vocal commands to the operator advising how to proceed and the shocks are delivered by means of a manual command given by the operator. A simple guided operation.

The automatic TecnoHeart A system
The Tecnoheart AED automatic defibrillators are the maximum expression of versatility. These models manage all of the operations autonomously, informing the care giver of the activities being performed by the machine. The shocks are also delivered independently, subsequent to a verbal warning, without operator intervention. This avoids delays and hesitation, and all activities are carried out without human involvement.

Tecnoheart AED A
Automatic defibrillator

Ask the expert

Who needs this?
All dental surgeries.

Why TecnoHeart?
Purchasing a defibrillator is an important and delicate decision, as it is the most important life-saving product, and **TecnoHeart is the best possible choice in terms of safety.**

- Art. 930304 **Tecnoheart AED A** Automatic defibrillator
- Art. 930302 **Tecnoheart AED S** Semi-automatic defibrillator

Frame and click!
Use your mobile phone to get further information about this issue.

TECNO ELECTRONIC DEFIBRILLATOR HEART

Tecnoheart AED S
Semiautomatic defibrillator

First Aid

Safe and simple

Guided voice instructions

Following the written messages and voice instructions, anyone is practically able to use this lifesaving device. The instrument automatically gauges when a potentially lifesaving shock is required and protects the user against accidental shocks. Using a simple approach, the **TecnoHeart device guarantees a timely response without hesitation. Thanks to its compact dimensions, the care giver can use this device rapidly and immediately, in the event of an unexpected cardiac arrest.**

Wide variety of accessories

AED devices are being installed in an increasingly wide variety of locations and **the TecnoHeart models are an excellent example, thanks to the help they offer care givers, enabling them to respond rapidly in an emergency.** Tecno-Heart devices are battery operated with long-life, high-performance lithium batteries that do not require maintenance.

Tecnoheart reliability:

- Daily self-testing of all critical components, to ensure the equipment's constant efficiency.
- Daily self-testing of batteries, circuits and software to ensure that efficacy is maintained at all times.
- Weekly self-testing for the purpose of checking partial and full energy.
- Electrode presence and functionality test. This is an extremely important check that only exists on a few highly advanced AED defibrillators.
- Battery capacity level – the charge level of the batteries is always visible, thereby permitting controlled management.
- Visual and acoustic status indicator.

Tecnoheart ease of use

- Buttons for operation: only 1 button to be activated in response to the voice command (semi-automatic version), no buttons (automatic version)
- Pre-connected electrodes: always ready for use
- Non-polarized electrodes
- Text display: a display duplicates the voice commands and alarms through icons and written instructions
- Voice prompts for the positioning of the electrodes and advanced CPR: to assist you in all kinds of activities and functions.

Tecnoheart technology

- Biphasic technology, more advanced system for delivering and supplying the shocks
- First shock efficacy: 100% certified
- Average shock per patient: 2.3
- Time required for efficacious defibrillation: 55 secs

TecnoHeart analysis algorithm

- Programmable VF/VT ratio: 120-240 bpm
- Asystole threshold: 0.08 Mv
- Detection of noise during analysis: yes
- Control of shocks delivered: yes
- Monitoring during CPR: yes
- Synchronized shock: yes
- Detection of Pacemaker pulse: yes

TecnoHeart other features

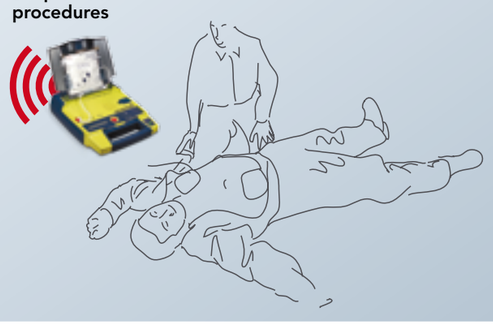
- Internal memory for ECG data: 60 minutes
- Compatibility with manual defibrillators: yes
- Multi-event functionality: yes
- Pediatric electrodes: yes
- Product guarantee: 5 years
- Battery guarantee: 4 years

Versione training

A training version is available on request

Art. 930301

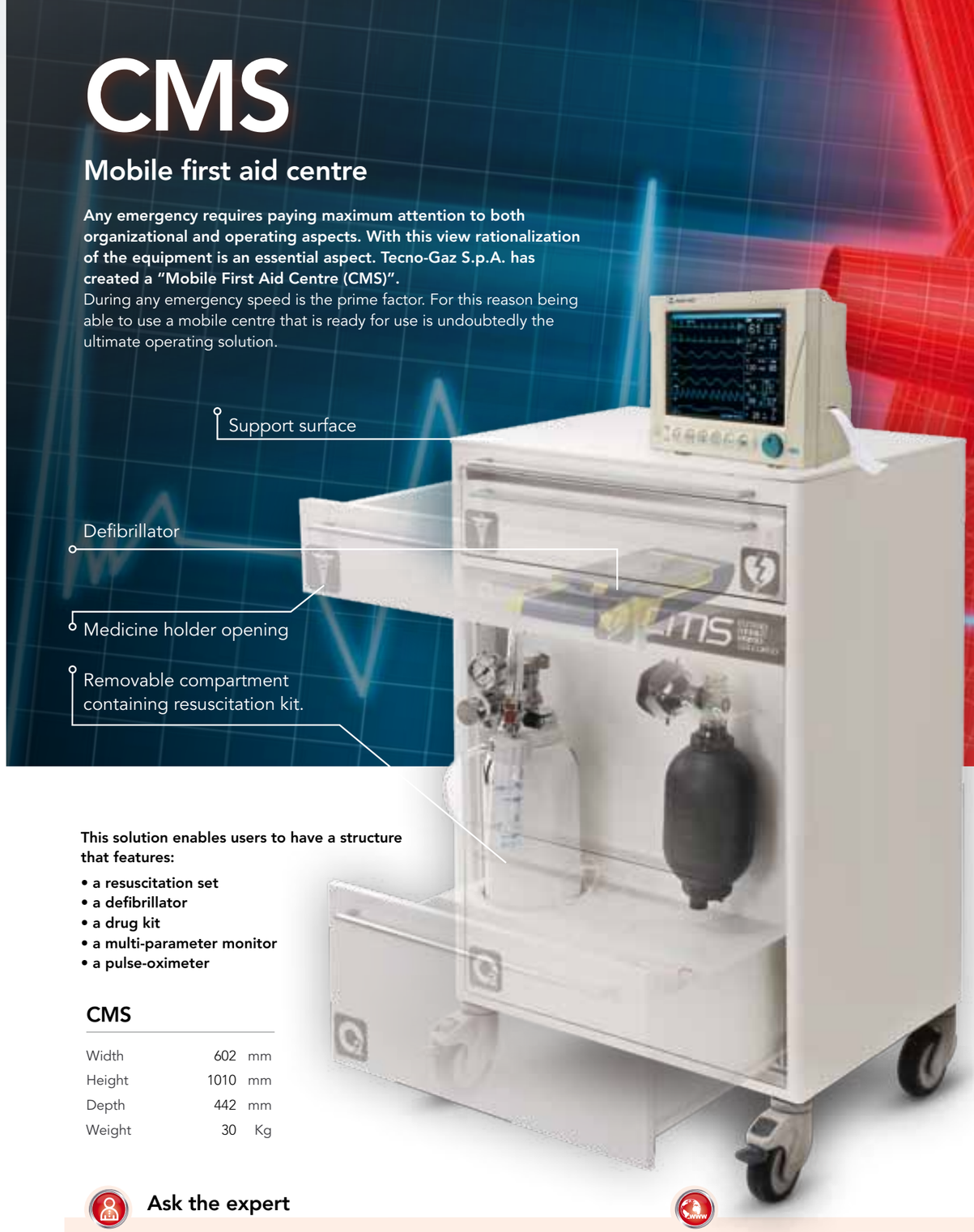
Simple vocal procedures



CMS

Mobile first aid centre

Any emergency requires paying maximum attention to both organizational and operating aspects. With this view rationalization of the equipment is an essential aspect. Tecno-Gaz S.p.A. has created a "Mobile First Aid Centre (CMS)".
During any emergency speed is the prime factor. For this reason being able to use a mobile centre that is ready for use is undoubtedly the ultimate operating solution.



This solution enables users to have a structure that features:

- **a resuscitation set**
- **a defibrillator**
- **a drug kit**
- **a multi-parameter monitor**
- **a pulse-oximeter**

CMS

Width	602	mm
Height	1010	mm
Depth	442	mm
Weight	30	Kg

TecnoHeart

Width	270	mm
Height	80	mm
Depth	310	mm
Weight	3,1	Kg
Length of electrodes	130	cm
Energy level	Variable increasing energy (VE) 150j to 360j	
Battery	Intellisense ® with lithium	

Accessories

Holder for wall-mounting
Tecnoheart holder with rear accessory pocket and expiry date inspection window.
Art. 930311

Identificate sign
Art. 930315

Accessories

Baby pair plates with key
Art. 930315

Battery
Art. 930314

Pair plates
Art. 930312

Ask the expert

Who needs this?
Designed for studios able to satisfy needs linked to dental emergency.

Why CMS?
A truly rational and complete solution that allows for the management of emergencies in the best possible way. A very high quality product at a very economical price.
An investment that will last a lifetime.

Art. 930330
Mobile CMS

Frame and click!
Use your mobile phone to get more information about this issue.

Lamp surgery

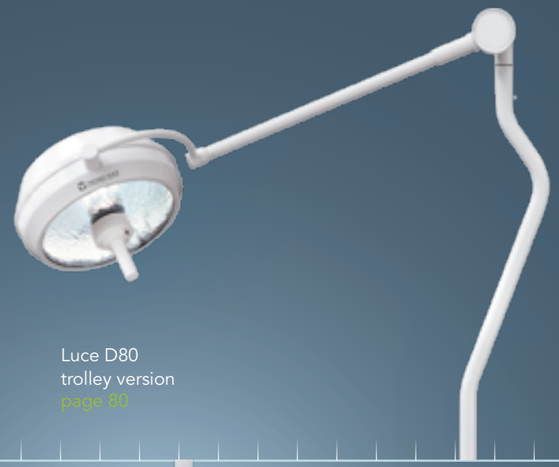
Illuminate your work and respect your eyes

Surgical litghting

Surgical lighting

Conventional light

Luce D40
wall-mounted version
page 80



Luce D80
trolley version
page 80

Luce D60
ceiling version
page 83

LED vision lamp

Led Vision
satellite version
page 85

Led Vision
trolley version
page 85

Slim LED lamp

Slim
ceiling version
page 86

Slim
trolley version
page 87

Lighting that makes your work easier

Unlike many other physicians, dentists constantly carry out surgical activities and like all surgeons they have to protect their hands and eyes. From this point of view, lighting assumes vital importance, as dentists operate in dark and non-linear cavities. In view of the high level of surgery attained in dental surgeries, the lighting of the surgical field becomes an absolute priority. **Dentists need to give thought to adopting new lighting systems that are suitable for new demands, and which "safeguard" their own sight.**

Tecno-Gaz S.p.A. offers 3 lines of surgical/scialitic lamps:

- single parabolic lamp with conventional lighting
- multi-parabolic LED lamp
- multi-parabolic LED lamp "SLIM"

Unique Advantages

- Option to **have appropriate lighting for inspections, diagnostic, simple surgery, complex surgery.**
- **Optimum "visibility"** for the dentist.
- Greater ability to **make out details.**
- **Distinction** between venous and arterial **blood.**
- **Easier identification** of colour.
- **Removes any overheating.**
- **Depth of focus always perfect.**

Surgical lighting

The lighting of the surgical field during outpatient surgery is a priority. Many professionals, such as dentists, dermatologists and gynaecologists, carry out diagnostic, inspection and surgical activities. Good and appropriate lighting allows for improved efficiency, keeping vision protected. In the case of dentists, the need is even more pronounced as they operate in dark and non-linear cavities.

Parabolic surgical/scialitic lights

Parabolic surgical/scialitic lights are normally designed for use in operating theatres, therefore solutions and structures are made for operators who work with layouts and surgical positions which are very different from those of dental operators. To satisfy this requirement, Tecno-Gaz has designed a product "made-to measure" for the dentistry sector.

Scialitic surgical lamps LIGHT D LINE

True colour reproduction

The reflective components of our lamps are treated with special multi-layered "SUN LIGHT" inserts that allow optimum reflection and ensure an index of chromatic yield (IRC) equivalent to 94 Ra. A great technical result that guarantees operators a chromatic yield similar to natural light, even in the most extreme conditions.

Depth of light

To provide maximum depth Tecno-Gaz lamps have been designed with reflective components with geometry composed of dozens of interconnected ellipsoids, which direct the rays of light into a cone of light that can illuminate deeply.

Eliminating shadows

The structures of the elliptical parabola are specially designed to reflect thousands of pinpoint rays of light onto the surgical field, allowing for the elimination of any kind of shadow.

Cold light

Tecno-Gaz has paid particular attention to this issue, adopting special "RMS97" filters that absorb and eliminate infra-red rays generated by halogen bulbs, guaranteeing a cold light.

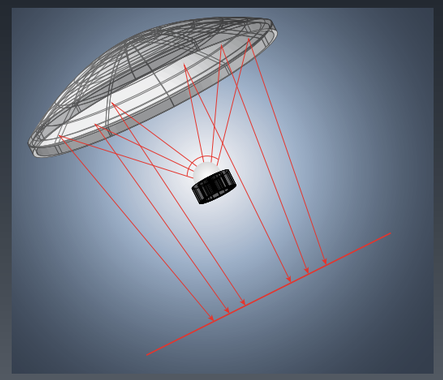
Colour temperature

The "sun-light" coating applied to the ellipsis and "dichroic" coating applied to the parabola, raise the colour temperature to 4.200 °K, guaranteeing a white light similar to that of the sun and thus ensuring the surgeon's well-being and absolute visual precision.

Scialitic surgical lamps LIGHT L LINE AND SLIM

LED light

The numerous and undisputed advantages of LED technology are the reason for its rapid development in all fields. SLIM is an LED lamp for outpatient and diagnostic use. The clear, cold light of SLIM 5.000 °K faithfully reproduces colours, ensuring optimum detail definition, an important prerequisite for various outpatient specialities.



Indirect light

The physical principle of reflection is the basis of Tecno-Gaz's lamps and is applied through a system of ellipses. These, in fact, reflect the rays of light emitted by the LEDs onto the area to be illuminated, thus obtaining an increased level of light intensity with a more limited number of LEDs: more than 50.000 lux at a distance of 1 metre with only 12 LEDs.

Indirect light has some notable advantages:

- it does not glare
- it does not tire out sight and encourages concentration
- it satisfies all the demands of vision in the diagnostic environment and in minor surgery.

Cold light

It does not emit infra-red rays: meaning a totally cold light. This is the fundamental prerogative of the very best scialitic lamps, as it avoids tissue dehydration during the procedure, and makes the work of the surgeon easier and more comfortable.

Luce D40

Scialitic surgical lamps

Benefit • Lighting intensity
100.000 Lux

Surgical techniques in dentistry have become more sophisticated and demanding, therefore the actions of the operators must not be dependent on anything else. **The intervention of more than one person and the position of the dentist's body often create shadows affecting the dentist's work.**

The new single-lamp surgery lights from Tecno-Gaz eliminate all these problems, guaranteeing perfect lighting, even in the event of parallel working.

Ceiling version
Art. 330-SR-2
Stands for ceiling fixing created according to the height of the ceiling.
Operating adjustments
The vertical arm has an angle of 97° with a range of 1455mm. It is balanced by a compression spring and can be adjusted over time if necessary. It is light and special bushings stabilise it in any position.
Luminosity adjuster
Lighting intensity is electronically adjustable with a potentiometer from 20,000 Lux up to maximum intensity. The surgeon can set the desired lighting intensity according to the type of surgery.
Parabola internal Layered
Natural glass
Anti-blinding
Autoclavable handle, for adjusting the spot light.

Ask the expert

Who needs this?
All doctors and dentists.

Why a surgical lamp?
A dentist operates in dark and irregular cavities therefore the need for better lighting is a vital one. **Lighting helps you to work better, with less visual stress and protects the sight of the operators.**

Frame and click!
Use your mobile phone to get further information about this issue.

Unique characteristics

- **Perfect and broad** lighting of the surgical field.
- Beneficial to the dentist's sight, which also has a **"visibility" that is greatly superior to current methods of lighting.**
- Optimum ability for making out details.
- Distinction between **venous and arterial blood.**
- **Better colour identification.**
- **Reduction** in the emission of heat.
- **Focus** is always **perfect.**

Depth
Light rays generated by the bulbs are reflected by the "elliptical" reflector onto the surgical field in pinpoints, ensuring that the light is constantly focused and three-dimensional. Thanks to this principle the light is always focused at a minimum distance of 60cm from the reflector.

Cold light
Special "RMS97" filters eliminate the infra-red rays generated by the halogen bulb, in order to safeguard against tissue dehydration during the procedure and to facilitate the surgeon's work.

Spotlight control
The spotlight can be adjusted manually using the special handle located at the centre of the reflector. This handle can be easily removed in order to undergo sterilization.

Elliptical reflector
This is made of aluminium and dozens of interconnected ellipsoids. The elliptical shape guarantees optimum lighting intensity with a low voltage halogen bulb, and the reflected light is always focused. The elliptical reflector has a "mirror" coating to increase the reflection and a "sun-light" coating to raise the colour temperature to 4.200 Klux with a colour rendering index equivalent to 94 Ra.

Aluminium structure
The "light-struc" load-bearing structure of the lamp is an aluminium tube of 45mm in diameter. This feature facilitates mounting without the need for mechanical lifting equipment, making the product ideal for all types of ceilings and easy to manoeuvre, and facilitates heat dissipation.

Optional

** as standard with D60 models, on request with D40 models*

Automatic lamp Changing System *
The lamps are equipped with a block composed of 2 halogen bulbs which are electronically controlled; **in the event of a failure in the main bulb the second bulb automatically comes into operation in place of the faulty one.** Simultaneously, a LED located on the cover of the lamp starts flashing indicating that the main bulb requires replacing.

Lamp replacement indicator*
An LED indicator is located on the cover that will start to flash, attracting the operator's attention so that the faulty bulb can be replaced.

Luce D40

Lighting intensity at 1m with a temperature of 4.200K ± 5% - voltage 22.8V: 100.000 Lux

Main bulb	100 W
Spare bulb	(100)[3] w
Automatic switch to replacement bulb with flashing light indicator	(100)[3] w Optional (Elettronic DLE Device)[2]
Approximate average life of bulb at 22,8V. [1]	2.000 h. ± 10%
CRI (Colour rendering Index)	92><94 Ra
Light field diameter adjustable using sterilizable handle	100 - 180 Ø mm
Depth of field without need for focus IEC 60601-2-41	1.140 mm
Focusable from - to	60 - 200 cm
Infra-red ray absorption	98 %
Infra-red filter	RMS97
Temperature increase at head height	2 °C
Diameter of the elliptical reflector	360 mm
Diameter of the reflector	400 mm
Lighting surface of the dome	698 cm²
Sterilizable handle	1
Colour	RAL 7035
Weight without anchoring tube	20 - 30 - 26 Kg
Power requirement	230/110 V

Standards

IEC 60601-1, IEC 60601-2-41, MDD 93/42 CEE, class 1 medical device	Yes
EMC 601-1-2	Yes
Battery group with automatic charger 1 or 3 hours, maintenance free	Optional

[1] Details subject to change based on different voltages power surges or frequency of use.
[2] Optional
[3] With DLE system (spare bulb) lighting intensity is reduced by 10%.

Models available

Ceiling version

Art. 330-SR-2

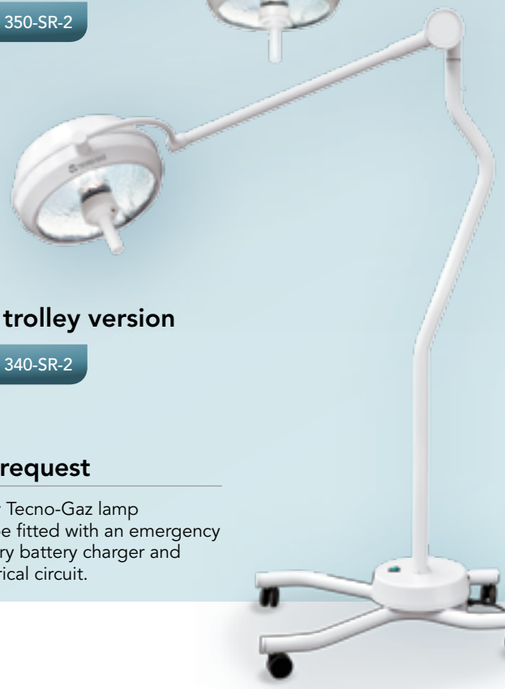
Satellite version

Art. 350-SR-2

The Tecno-Gaz lamps can be supplied in satellite versions, in various combinations on request.

Wall-mounted version

Art. 340-SR-2



On trolley version

Art. 340-SR-2

On request

Every Tecno-Gaz lamp can be fitted with an emergency battery battery charger and electrical circuit.

Luce D60

Frame and click! Use your mobile phone to get further information about this issue.

Art. 310-SR-2
Luce D60
Ceiling

Wall-mounted version

Art. 310-SR-2

Luminosity adjuster

Lighting intensity is electronically adjustable with a potentiometer from 20.000 Lux to the maximum intensity. **The surgeon can set the desired lighting intensity** corresponding to the type of procedure.

Benefit • Lighting intensity
150.000 Lux

On request

Each Tecno-Gaz lamp can be equipped with an emergency battery, battery charger and electrical circuit.

Standard

Automatic lamp changing system*

The lamps are fitted with a block composed of 2 halogen bulbs, electronically controlled **in the event that the main bulb stops functioning, the second bulb will automatically replace the faulty one.** At the same time, an LED located on the lamp's cover will start to flash, indicating that the main bulb needs to be replaced.

Lamp replacement indicator*

An LED indicator is located on the cover that will start to flash, attracting the operator's attention so that the faulty bulb can be replaced.

Luce D40

Lighting intensity at 1m with a temperature of 4.200K ± 5% - voltage 22.8V: 100.000 Lux

Main bulb	100 W
Spare bulb	(100)[3] w
Automatic switch to replacement bulb with flashing light indicator	(100)[3] w Optional (Elettronic DLE Device)[2]
Approximate average life of bulb at 22,8V. [1]	1.000 h. ± 10%
CRI (Colour rendering Index)	92><94 Ra
Light field diameter adjustable using sterilizable handle	100 - 180 Ø mm
Depth of field without need for focus IEC 60601-2-41	1.140 mm
Focusable from - to	60 - 200 cm
Infra-red ray absorption	98 %
Infra-red filter	RMS97
Temperature increase at head height	2 °C
Diameter of the elliptical reflector	360 mm
Diameter of the reflector	400 mm
Lighting surface of the dome	698 cm²
Sterilizable handle	1
Colour	RAL 7035
Weight without anchoring tube	20 - 30 - 26 Kg
Power requirements	230/110 V

Standards

IEC 60601-1, IEC 60601-2-41, MDD 93/42 CEE, class 1 medical device	Yes
EMC 601-1-2	Yes
Battery group with automatic charger 1 or 3 hours, maintenance free	Optional

[1] Details subject to change based on different voltages power surges or frequency of use.
[2] Optional
[3] With DLE system (spare bulb) lighting intensity is reduced by 10%.

Luce D60

Light intensity at 1 mt. distance with colour temperature of 4.200K ± 5% - at voltage 24V: 150.000 Lux

Main bulb	150 W
Spare bulb	150 W
Automatic switch to replacement bulb with flashing light indicator	2 MCC card
Approximate average life of bulb at 22,8V. [1]	2.000 h. ± 10%
CRI (Colour rendering Index)	92><94 Ra
Light field diameter adjustable using sterilizable handle	150 - 220 Ø mm
Depth of field without need for focus IEC 60601-2-41	1.150 mm
Focusable from - to	60 - 200 cm
Infra-red ray absorption	98 %
Infra-red filter	RMS97
Temperature increase at head height	2 °C
Diameter of the elliptical reflector	560 mm
Diameter of the reflector	600 mm
Lighting surface of the dome	2.318 cm²
Sterilizable handle	1
Colour	RAL 7035
Weight without anchoring tube	45 Kg
Power requirements	230/110 V

Standards

IEC 60601-1, IEC 60601-2-41, MDD 93/42 CEE, class 1 medical device	Yes
EMC 601-1-2	Yes
Battery group with automatic charger 1 or 3 hours, maintenance free	Optional

[1] Details subject to change based on different voltages power surges or frequency of use.

Led Vision L30

Luminosity adjuster
Lighting intensity is electronically adjustable with a potentiometer from 20,000 Lux up to **maximum intensity.** The surgeon can set the desired lighting intensity corresponding to the type of procedure.
Parabola
internal layered
Stands for ceiling fixing created according to the height of the ceiling.
Screen
protective
Autoclavable handle,
for adjusting the spotlight
TECNO-GAZ

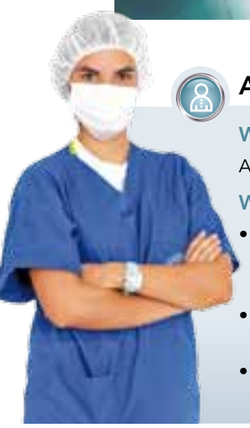
Ceiling version

Art. 364-S2

Benefit • Lighting intensity
100.000 Lux

Innovative technology

Innovative Technology LED vision is an extremely high-technology device designed to guarantee excellent service. LED Vision is made up of 30 elliptical reflectors subdivided into 6 units of 5 LEDs each. Indirect light: 30 elliptical reflectors, the result of a complex mathematical calculation, reflect the rays of light from the LED in pinpoints to ensure three-dimensional lighting and the elimination of shadows on the surgical field.



Ask the expert

Who needs this?

All doctors and dentists.

Why an LED technology light?

- **It has very few maintenance costs:** in fact, the average life of an LED is 50,000 hours and it also does not burn out. Therefore it will not go dark and the average life of the lamp is 25 times greater than a traditional lamp.
- **It is completely ecological and simple to dispose of.** In fact, unlike traditional light sources, LED's do not contain mercury, toxic gases, filaments or fragile parts.
- **It is a safe product for long term use, thanks to strict thermal and electrical testing.** Every small detail has been designed, planned and tested by our Research Centre.

Frame and click!
Use your mobile phone to get further information about this issue.

Models available

Ceiling version

Art. 364-S2

Wall-mounted version

Art. 362-S2

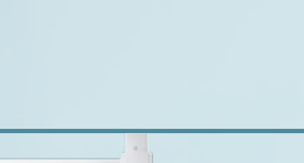
Tecno-Gaz lamps can be supplied in satellite versions in various combinations on request.

Satellite version

Art. 369S2

On request

Every Tecno-Gaz lamp can be fitted with an emergency battery battery charger and electrical circuit.



On trolley version

Art. 360S2

Led Vision L30

Technical information

Light intensity at 1 mt.distance (Ec)	100.000/60.000 Lux
Temperature of the colour of irradiated light	4.500/5.000 °K
Index of chromatic performance	94/90 Ra
Diameter of luminous field at 50% of luminous intensity	90 mm
Diameter of luminous field at 10% of luminous intensity	200 mm

Electrical features

Transformer c.a. 50/60Hz	63 VA
Electrical absorption	70 W
Light source	Led n°30
Control of light intensity	Electronic
Endurance of Led	50.000 hours

Technical information

Depth of illuminance IEC 60601-2-41 (L1+L2) at 20%	1050 mm
Total energy irradiated at max level of lightening	112 W/m^2
Relation between irradiated energy and lightening	1,1 $mW/m^2.lx$
UV energy irradiated for a wavelenght minor than 400 nm	0,002 W/m^2

General data

Colour	RAL 9003
Min. Height of the room	270 cm
Directive	93/42/CEE
Rules	IEC 60601-2-41
Class of product	Medical Device Class I

Optionals

Battery pack complete with battery charger endurance up to 8 hours	on demand
Transformer for different voltages	on demand

Slim

Lamp with LED technology

Luminosity adjuster

Lighting intensity is electronically adjustable with a potentiometer from 25,000 Lux up to maximum intensity. The surgeon can set the desired lighting intensity corresponding to the type of procedure.

Autoclavable handle, for adjusting the spotlight.

Benefit • Lighting intensity
50.000 Lux

Ergonomic

The circular reflector, designed to perfectly illuminate the working field and to eliminate all types of shadows, is fitted with easy to use side handles making it easy to position. The lighting component is ultra-flat so as not to hinder the operator and is fitted with an ultra-resistant polycarbonate screen that guarantees protection against accidental impact. **SLIM can be easily positioned thanks to its rotation on 4 axes:**

- **the structure can move laterally for 360° without locking**
- **the vertical movement of the arms is balanced by a compression spring.**
- **the reflector can be rotated both on the vertical and horizontal axes.**

Movements are possible using the sterilizable handle. The lower part of the reflector incorporates, as well as a master switch, a digital control to adjust luminosity, with an LCD display of the intensity setting. **The ergonomic design guarantees increased manoeuvrability and the versions available, ceiling and upright, allow it to be used in any outpatients' clinic or laboratory.**

Versatile

The characteristics of SLIM make it a unique lamp. The lighting intensity (more than 50,000 lux at 1 m) and its technical performance make it suitable as a lamp for small, precise procedures, intensive care units, recovery rooms and first aid; **while its manageable, non bulky structure** makes it **suitable also during diagnosis, in pre-operating rooms and analysis laboratories.**

Ask the expert

Who needs this: All dentists.

Why an LED lamp?

The numerous and undisputed advantages of LED technology are the reason for its rapid development in all fields. SLIM is an LED lamp for outpatient and diagnostic use. The clear and cold light of SLIM 5.000 °K, faithfully reproduces colours ensuring optimum detail definition, important for the various outpatient specialities.

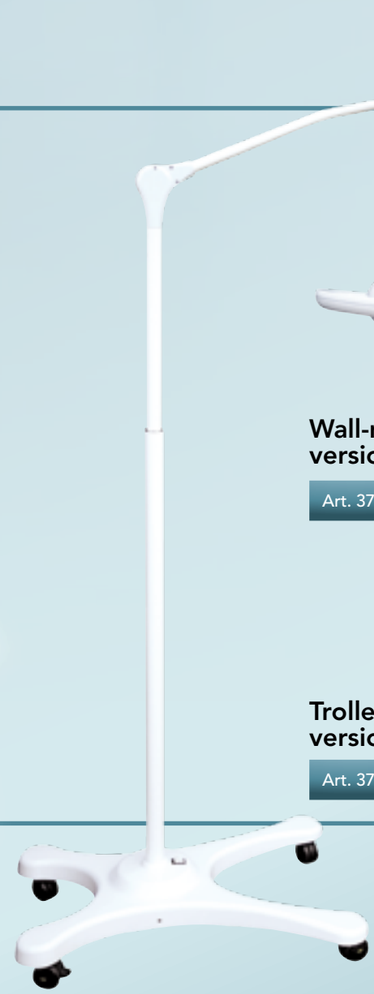
Frame and click!
Use your mobile phone to get further information about this issue.

Models available

Ceiling version
Art. 370-S2

Wall-mounted version
Art. 373-S2

Unit version
Art. 374-S2



Trolley version
Art. 372-S2

Quality and innovative technology

The smaller size and advanced technology that make this SLIM lamp stand out are the result of proven experience recognised on an international level. This product is a perfect combination of technological progress, innovative design and typically Italian quality.

Lighting intensity adjustment

The lamp is fitted with an electronic lighting intensity adjuster, **able to adjust from 25,000 to 50,000 lux.**

Handles

It is equipped with handles making the lamp easy to manoeuvre up to 360°, **easy for the operator to dismantle and completely autoclavable.**

Slim

Voltage	100÷230 V~ 50÷60 Hz
Electical absorption	30 W
Light source	Led n°12
Average LED life	50.000 ore
Illumination control	50 ÷ 100 %
Lighting intensity at a distance of 1m (Ec)	50.000 Lux
Diameter of the light field diameter at 50% of the lighting intensity	85 mm
Diameter of the light field diameter at 10% of the lighting intensity	140 mm
Depth of lighting IEC 60601-2-41 (L1+L2) at 20%	150 (30/180)
Total irradiated EE energy when lighting reaches the max level	119 W/m²
Relationship between irradiated EE energy and EC lighting	2,38 mW/m².lx
UV energy irradiated for a wavelength below 400 nm	0,001 W/m²

Conscious sedation

in odontostomatology

Advantages

- **Sedation brings about the complete relaxation of the nervous system,** raising the pain threshold while making it possible to maintain collaboration and attention.
- **Allows the professional to intervene** in a calm operative situation.

Conscious sedation equipment

MasterFlux Plus
Mobile version
page 92

MasterFlux Plus
Wall-mounted version
page 94

Cylinder kit
Resuscitation kit

Cylinders, marks and circuits
page 95

Perfumed masks
Different sizes
page 95

The correct approach

Thanks to the work of the National Consensus Development Conference on Anaesthesia and Sedation in the Dental Office) extremely signification data has been brought into the light. It has, in fact, emerged that dentists often underestimate the effectiveness of the psychological approach in reducing patient anxiety. The right psychological approach would, in fact, make both sedation and general anaesthetic superfluous in many cases.
Why do dentists not take this technique into consideration? Firstly, it must be remembered that neither dentists nor paramedic staff receive adequate training in behavioural psychology; cost/effectiveness has also to be considered, before even counting the methodological deficiencies of the research focused on demonstrating the effectiveness of the psychological approach over a pharmacological one, and the indication of cases in which the two approaches should be combined. **This information intends to focus on the methodological problems in this area and to identify future research requirements.** We believe, in fact, that the wide-spread use of sedation methods.

Sedation is a technique that has been wide-spread in the United States, Canada and various European countries for many years now. **The controlled administration of oxygen and nitrous oxide through inhalation induces a feeling of relaxation, reducing the emotional stress, the perception of pain and the state of anxiety, making the patient easier to treat and facilitating collaboration with the physician,** while maintaining unaltered protective reflexes. It is important to remember that sedation does not bring about any side effects and only presents generic contraindications.

Tecno Gaz S.p.A. is the only Italian company that manufactures a machine for sedative analgesia, the Master Flux Plus, complete with automatic concentration flow box.

Sedation
in odontostomatology

Sedation is a technique that has been wide-spread in the United States, Canada and various European countries for many years now. **The controlled administration of oxygen and nitrous oxide through inhalation induces a feeling of relaxation, reducing the emotional stress, the perception of pain and the state of anxiety, making the patient easier to treat and facilitating collaboration with the physician,** while maintaining unaltered protective reflexes. It is important to remember that sedation does not bring about any side effects and only presents generic contraindications.

Why sedation?

Pediatric dentistry

It is well-known that children are the subjects who tend to suffer most from the problem of "dental anxiety", which often manifests itself in a total lack of collaboration. The dentist therefore has to deal with unease and lost time. **Sedation resolves this problem allowing time to be saved and facilitating the work of the operators.**

The disabled

It is often impossible to subject those with certain types of disability to outpatient dental care. **In some cases sedation can radically resolve this problem.**

Implantology

This wide-spread technique "obliges" the patient to long procedural times that can cause stress. which can sometimes manifest itself as "non-collaboration", during the most delicate moments. Sedation helps the patient face all the phases of the procedure in a calm and cooperative way.

Ask the expert

Who needs this?

All dentists, in particular those who practise **paediatric dentistry**, the treatment of the disabled and specifically those who carry out **implantology and surgery.**

Why MasterFlux Plus?

- **To work better and more calmly,** as even phobic patients, children or the disabled become cooperative.
- **Because often sedation becomes an added value of great importance** that attracts clients and subsequently creates publicity.

Work better to work more

Dental phobias and other daily situations The problem of dental phobias is very wide-spread, even among adult subjects, keeping them away from dental surgeries. There are also daily routine procedures, such as taking impressions, removing tartar, which often cause unwanted problems. Sedation resolves all these problems "bringing the patient closer" to the dentist. The greatest benefit is undoubtedly for the operators, who can work calmly, without stress and make a considerable time saving.

MasterFlux Plus

Sedation equipment

Sedation device with automatic flux control.
Master Flux Plus is the only piece of sedation equipment completely designed and built in Italy. All its parts are manufactured by Tecno-Gaz and undergo scrupulous individual testing. To avoid a negative visual or psychological impact on the patient, it includes an elegant cabinet that can contain the oxygen and nitrous oxide cylinders with corresponding adapters and attachments. The unit is RAL 9002 colour, fitted with wheels, a laminated instrument tray and an internal compartment designed for 5, 10 and 14 litre cylinders. On the front there is a space for the flow control box and its accessories. Master Flux Plus has passed the stability tests required by the EN 60204 standards.

New

Flow control box

The flow control box is a sophisticated project of mechanical engineering with an automatic proportioning service system. The mechanical method was chosen due to its "direct" gas management: i.e. it is not subject to other electronic or electrical " controls". We have thus created a high precision product that is highly reliable and easy to use. User-friendly, **Master Flux displays technical characteristics that make it extremely versatile** and with effective safety devices that absolutely do not allow for errors to be committed that would negatively impact the patient. The silk-screen drawing is simple and easy to read.

Simple, complete and reliable

Master Flux Plus comes complete with:

- **flow control box**
- **respiration control bag**
- **1 circuit with adult mask**
- **1 circuit with baby mask**
- **1 OX adjuster with tube and attachment**
- **1 N_2O adapter with tube and attachment**

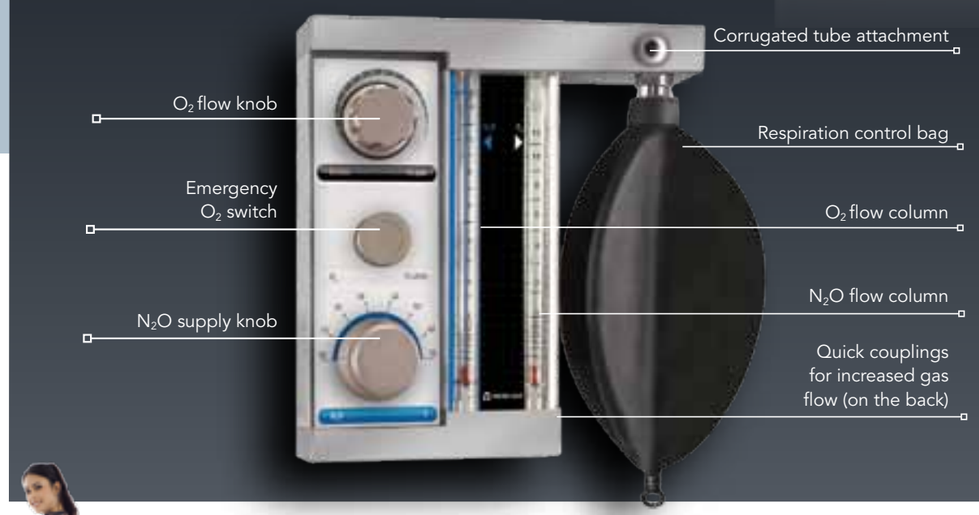
Safety:

- Blocks the flow of N_2O when the O_2 pressure is zero (oxygen failure)
- Minimum concentration of oxygen. Oxygen is always present at 30%, thus avoiding the danger of HYPOXIA or ANOXIA.
- A special valve prevents expired gases from returning into the circuit. A special device also allows for ambient air to be breathed in the event of a gas failure.

Automatic flow control:

The system has been designed in order to make the flow administration simple and quick. In fact, with the O_2 flow knob we can stabilise the flow in litres per minute as required by the patient. Based on their respiratory volume, using the **"adjuster knob",** we can choose the flow that we have established, which is subdivided and serviced from 0 to 70% of the N_2O.

In detail



Ask the expert

Who needs this?

All dentists, in particular those who practise **paediatric dentistry**, treatment of the disabled and especially those who carry out **implantology.**

Art. 1600AS

Why MasterFlux Plus

- It is a highly-tested and **extremely safe piece of equipment.**
- Allows for the treatment of patients that are not always treatable as outpatients but, above all, allows **professionals to intervene in a calm operating situation.**

Frame and click! Use your mobile phone to get further information about this issue.

MasterFlux Plus

Wall-mounted sedation equipment

Solution for centralized system

This version has an extendable arm, separate couplings for hooking up to the gases, flow control box and the usual accessories. **The wall-mounted version means that a Master Flux Plus art. 1601/AS can be installed in each workstation, with the gases being delivered from a centralized point.** If the machine does not need to be used simultaneously in all workstations, simply make provision for the extendable arm and connections next to each dentist's chair and move the flow control box from one workstation to another. This solution guarantees flexibility and economic savings.

Ask the expert

Who needs this

All dentists, in particular those who practise **paediatric dentistry,** treatment of the disabled and especially those who carry out **implantology.**

Art. 1601AS

Why a wall-mounted MasterFlux Plus?

- **In the event that you want to set up the sedation system in more than one operating** room in the same facility, it is possible to create stations with oxygen/ nitrous oxide outlets and an extendible arm, using only one flux control box. It is, in fact, **mobile as it can be simply inserted into the extendible arm stand.**

Frame and click! Use your mobile phone to get further information about this issue.

MasterFlux Plus Accessories (mobile and wall-mounted versions)

Cylinder kit O_2 - N_2O lt. 5
For therapeutic use.
Art. 1502-A

Cylinder kit O_2 - N_2O lt. 10
For therapeutic use.
Art. 1503-A

Complete resuscitation kit bag.
Mask and tube with connection.
Art. 1504-A

Circuits and masks

The circuits supplied, one for adults and one for children, have been created with very high-quality materials. The masks are universal, therefore thanks to the connections supplied they can be set up to be attached to a surgical aspirator or for passive scavenging.

Standard

Adults
Art. 1605A

Newborns
Art. 1607A

Optional

Flavoured silicon masks single use, mixed sized packs 24 pcs.
Art. 1601AS - 1610 AS

Children
Art. 1606A

MasterFlux Technical information (mobile and wall-mounted version)

MasterFlux Plus (mobile version)

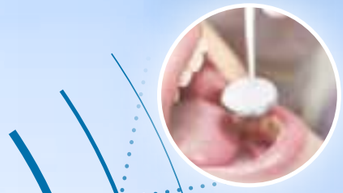
Width	460 mm
Height	1182,5 mm
Depth	442 mm
Weight without bottles	42 Kg
Weight with bottles 5 Lt	63 Kg
Weight with bottles 10 Lt	81 Kg

MasterFlux Plus (wall-mounted verison)

Width	230 mm
Height	379 mm
Depth	400 mm
Weight without bottles	5 Kg

Professional whitening

in dentistry



Professional whitening systems

Product kits and accessories

Pearl
Whitening lamp
page 100

Home Kit
for the patient
page 105

Advantages

Personal care and beauty are vital elements of modern society **and caring for one's teeth is an essential part of this context, in particular everyone's expectations of having white and healthy teeth.**

Clip
Portable whitening lamp
page 102

Accessories for whitening
page 105

Product kits
for dentists
page 104

Overall project

Whitening is a very wide-spread technique and, in order to obtain real results without causing damage, quality products and devices must be used. Unfortunately, a lack of knowledge of the techniques often pushes people towards products and devices that are not suitable. **Tecno-Gaz markets products that have been researched and created at its own plants in Italy, and each product has appropriate scientific support.** We are able to offer you a very interesting range of efficient products.

PROFESSIONAL WHITENING

CLIENT SATISFACTION

Added value for your surgery

Whitening is a beauty treatment that is widely appreciated by patients, therefore being able to carry out this service in the best possible way is undoubtedly an excellent professional opportunity.

Professional whitening

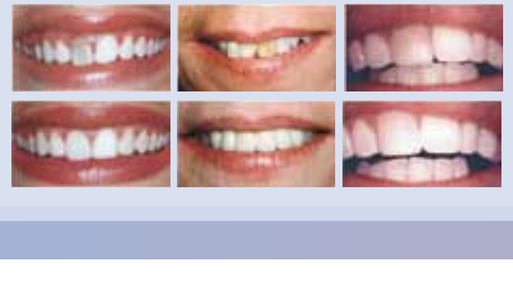
Professional teeth whitening system

Why whiten teeth?

A person's smile and teeth are among the first things we look at when we communicate with others; it is like a visiting card that contributes to the first impression that we make on others. **More and more people are getting tired of having stained, yellow teeth. In fact, the idea has also started to spread that even the natural colour of teeth, which is different for everyone and is genetically determined, is darker than many people would like** (according to recent studies 50% of the world's population is not satisfied with the colour of their teeth and is trying in any way possible to make them whiter).

Many studies and many dentists confirm this trend: people want increasingly whiter teeth and even young people with naturally white teeth are undergoing whitening treatments to further improve their smile. It is estimated that up to now approximately **30 million professional whitening treatments have been carried out** worldwide in complete safety.

The substances that can stain teeth are countless: practically all coloured substances can potentially stain teeth.



Before

After

How do teeth get stained?

Enamel and dentine are not completely isolated from the outside world as many believe, but absorb and exchange substances with the saliva. **It is through these processes that, for example, the tooth is penetrated even by the fluorine contained in toothpastes to remineralise the enamel and protect the teeth from caries.** As well as the useful substances, however, external coloured substances (chromogenes) are also absorbed and deposited beneath the surface of the enamel. These chromogenes serve no purpose, they are not harmful and they do not compromise the health of the teeth, but they do contain double chemical bonds that absorb the light and make the teeth appear darker and more yellow. **Over time the tooth takes on an increasingly darker colour. It is for this reason that an adult, even if they have always had scrupulous oral hygiene, will have teeth that are more yellow than when they were younger, as the teeth are subject to:**

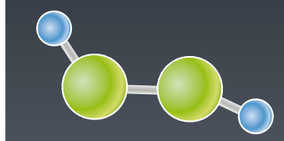
- **the natural ageing process, that modifies the composition of the tissues.**
- **absorbed coloured substances, which can be removed only with professional dental whitening, as brushing and professional cleaning cannot eliminate them.**

The substances that can stain are countless: practically all coloured substances can potentially stain teeth.

- **tar and nicotine (present in smoke)**
- **tannin (present in tea and red wine)**
- **coffee**
- **tetracyclines * (type of antibiotics)**
- **fluorine * (taken excessively through the external environment, tablets and fluorinated water)**

*Intake during the development of permanent dentition (6 - 14 years), excluding wisdom teeth that come through at a variable age).

Whitening agents



Hydrogen peroxide

Hydrogen peroxide, a substance that is commonly contained in oxygenated water, is the true bleaching agent. The highly unstable oxygen molecules penetrate through the dental enamel and react with the molecules of chromogenic substances. These substances contain double chemical bonds that absorb light and make the teeth appear darker and more yellow. **Through its oxidising action oxygen breaks these double bonds, transforming them into single bonds, breaking down the complex pigment molecules into simpler, colourless molecules.**

Ask the expert

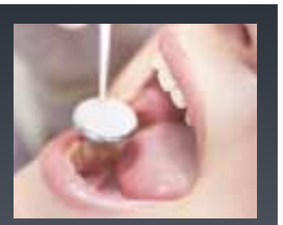
Who needs this?

All dentist

Why a professional whitening system?

Professional whitening is a technique that is growing fast as beauty is a vital factor in modern society. Having a beautiful smile is important, as well as beauty it also increases confidence and self-esteem. Being able to use a professional whitening system means making clients loyal by offering a service that provides satisfaction and well-being.

Methods of dental whitening



A vast range of products and methods exist on the market for whitening teeth and should be chosen based on the various characteristics and needs of the patient. With the exception of whitening toothpastes and whitening chewing gums, all dental whitening products, whether professional or "do-it-yourself", have the same active whitening ingredient: hydrogen peroxide or carbamide peroxide (which changes into hydrogen peroxide anyway). **What changes is the concentration of the product and the application method, variables that have a considerable influence on the procedures and the final results.**

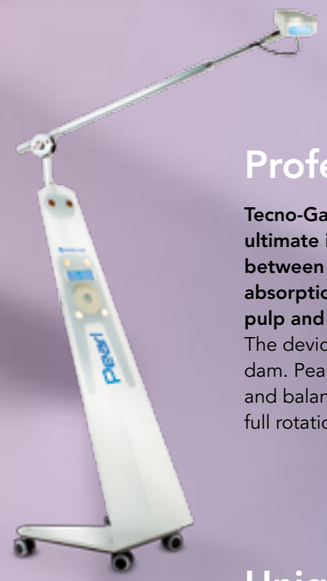
"Do-it-yourself" whitening treatments are characterised by:

- Lack of supervision by a dentist
- Low percentage of hydrogen peroxide
- Non-individual, pre-defined, systems of application (e.g. strips, applicators..), that do not correspond to the anatomy of the teeth and the real length of the arches.
- Limited whitening effectiveness (maximum 5 tones attained with the strip system).
- Considerable time required for whitening.
- Results last for 6 - 12 months.
- Low cost in relation to professional whitening systems.

Professional whitening systems are characterised by:

- Supervision by a dentist
- High percentage of hydrogen peroxide (up to 35 %).
- Individual application systems allowing the gel to act with optimum effectiveness and with minimum side effects.
- Guarantee of reaching the maximum possible whitening.
- Less time required for increased whitening.
- Results last for 2 - 5 years.
- High cost in relation to "over the counter" whitening systems.
- Minimum commitment of time and patience for maximum results.

Pearl



Professional whitening lamp

Tecno-Gaz has created Pearl, a new and highly-evolved device that is the ultimate in whitening systems on the market today. Pearl uses a wavelength between 480 and 520 nm. The lamp has a special screen that allows for the absorption of ultraviolet and infra-red light, preventing the heating up of pulp and mucous membranes, avoiding or reducing their sensitivity.
The device has a rapid polymerisation function for use on the protective liquid dam. Pearl has been created to take up very little space, the base is solid, stable and balanced and fitted with wheels that can be easily moved. The lamp has a full rotation system allowing it to be positioned as desired.

Unique characteristics

Treatment times

Treatment times are an important aspect of whitening techniques.
In truth, there are no pre-set times, as the treatment is subject to many factors such as:

- **the original colour of the teeth**
- **the desired result**
- **the desired number of sessions**
- **the sensitivity of the individual patient**
- **how the dental surgery wishes to define this service**

Nevertheless, Pearl allows considerable results to be obtained with a total treatment time of 20 minutes, split into 2 sessions lasting for 10 minutes each.

Pearl LCD screen

A wide liquid crystal display allows for all the functions of the device to be seen and monitored. The machine has an electronic control that manages treatment times, pauses and start-up.

Ask the expert

Who needs this?

All dentists.

Art. 4450KS

Why PEARL:

It is a MADE IN ITALY product that has been completely designed and created by Tecno-Gaz S.p.A. who guarantees the product over time. PEARL allows for a complete treatment time of 20 minutes split into 2 sessions lasting for 10 minutes each, but with just one layer of gel, ensuring a considerable cost and time saving. **PEARL comes complete with video instructions** to guarantee correct and straight-forward service by the operator, and in order to obtain maximum results.

Frame and click! Use your mobile phone to get further information about this issue.

Whitening agents

Cold light Led

Light is controlled and channelled through a special fiber-optic screen that ensures concentrated rays, allowing the device to provide maximum yield and a reduction in times.

Display for control, adjustment and setting of treatment times
Lamp adjustment arm
Arm coaxial regulation
Joint for positioning the radiating element
Cold light LED and optical fibre screen
Pearl
Stable wheeled base for easy moving around

Pearl

Width	450 mm
Height	1400 mm
Diameter	Ø 500 mm
Weight	15 Kg
Single-phase power supply	90 V - 220 V ca.
Frequency	50/60 Hz
Maximum absorbed power	50 VA
Fuse	F 1 A
Safety class	I BF

Light Emission Characteristics

Radiation wavelength	495 mm
Maximum radiated light power	30.000 mw
Medical device	Class1 93/42/CEE
Electric safety	Class I Type B CEI EN 60601-1
Type of protection	PE

Clip

Professional whitening lamp

The mod. Clip lamp is a new teeth whitening system that removes intrinsic stains. The lamp is simple and practical and includes an irradiating component in which the LEDs are located. They are constantly controlled and cooled, avoiding heat transference onto the treated area.

Practical and functional

- Easy flexible arm that allows for the correct positioning of the irradiating component, in relation to the mouth of the patient.
- Mechanical clamp for fixing the lamp.
- Electronically controlled power supply, designed to be fixed to a wall or placed on the ground.

Ask the expert

Who needs this?

All dentists.

Art. 4455KS

Why CLIP?

There are many surgeries that are not particularly in favour of whitening techniques, and a simple and economical device aims to bring even the most reluctant surgeries to a whitening system, all with **maximum results and minimum investment. The product addresses a section of clientele that wants simplicity and adaptability, and this is why CLIP has been created with the very best technical characteristics, but also with minimalist logic.**

Frame and click!
Use your mobile phone to get further information about this issue.

Professional whitening

As ergonomic as possible

- Below the head there is a master switch that switches the machine on and off and starts and stops the treatment.
- Switching the machine on will activate a timed session, lasting 10 minutes, which will then automatically switch off.

As practical as possible

Everything is contained in a practical plastic case useful for transporting the device. from one surgery to another.

Clip

Weight	5 Kg
Single-phase power supply	230 Volt
Frequency	50 Hz
Maximum absorbed power	50 VA
Fuse	F 1 A

Light emission characteristics

Radiation wavelength	495 mm
Maximum radiated light power	30.000 mw
Medical device	Class1 93/42/CEE
Electric safety	Class I Type B CEI EN 60601-1
Type of protection	PE

Whitening products

Tecno-Gaz products

The products used have been tested and certified over time according to the corresponding European standards. **Tecno-Gaz has chosen a strategy of controlling the prices of its consumer products, allowing all professionals to be able to offer the treatments to a greater number of clients.** Undoubtedly an important and strategic choice that will ensure that every dentist has the chance to make whitening an important business aspect for their surgery, ensuring client satisfaction and loyalty.

We help you to promote this side of your business

In dentist surgeries beauty practices are part of the daily routine and are becoming very important for the prestige and the profitability of the surgery. Personal care and beauty are vital elements of modern society and caring for one's teeth is an essential factor within this context, particularly everyone's expectations of having white and healthy teeth.
White teeth bring luminosity to your face and to your smile, providing a perception of cleanliness, well-being and pleasantness, increasing a person's self-esteem. The new techniques give everyone the chance to have whiter teeth and thus improve their appearance. This is why whitening is a technique that dentists should publicize among their clients, as by using this system the business of the surgery is fuelled and client satisfaction and happiness is created. Creating and giving a beautiful smile is undoubtedly a positive and concrete action that generates definite loyalty and prestige for the surgery.

Professional whitening

BasicSet

- Beta: n°5 blisters containing 38% liquid hydrogen peroxide
- Alfa: n° 5 syringes containing 0.75g of activator
- LiquidMask: n°3 syringes with 3.5g with liquid dam for polymerisation
- 1 Mixing spatula;
- 10 Micro brushes for application;
- 10 flow tips for dam

Art. 4418S2

Desens

Desensitiser kit potassium nitrate

Includes 10 single patient use bottles 0.5 ml each + 10 brushes.

Art. 4412S2

Kit Home

A set including 3 silicone bites, already completed with gel, ready to be used, and relevant instructions, an optimal way to increase the value of an important treatment.

Art. 4417S2

Accessories

Disposable mouth opener
25 pieces box

- Small size Art. 4422-S
- Large size Art. 4420-S

Goggles
2 pieces box
Art. CM61046

Ask the expert

Who needs these?

All dentists that use dental whitening

Why Tecno-Gaz products?

The products used have been tested and certified over time according to corresponding European standards. Quality and safety for the beauty of your teeth.

Facial Beauty
in dentistry

Hyperbaric oxygen technology

Oxis
page 110

Oxis handpieces
page 111

Transdermal vehiculation technology

Era
page 112

Face handpiece for Era
page 113

Brightskin Face handpiece
page 113

Home products

Era, Oxis home products
page 114

Multifunctional chair

Rania
page 116

Overall project

Facial beauty is the final frontier for every dental surgery, in fact, integrating a perfect mouth into a suitable "surrounding" is certainly a high-quality jump for every dental surgery. In fact, the concept of beauty in dentistry is that of integrating these treatments into dental practices, **a way of broadening your services, increasing your business and focusing on complete patient satisfaction.**

Why take up this new business?

The beauty industry is expanding widely and treatments for the face make up 80% of this, therefore dentistry is perfectly relevant to this practice, which **is starting to interest more and more dentists and will undoubtedly become the future frontier for modern dentistry.**

Facial beauty and dentistry

A new market for the dentist

We are living in a period of great social and economic change, which requires everyone to deeply evaluate their professional activities. Competition has increased, consumer and market dynamics are changing, even professional dynamics are changing considerably and all this requires changes in terms of strategy and objectives.

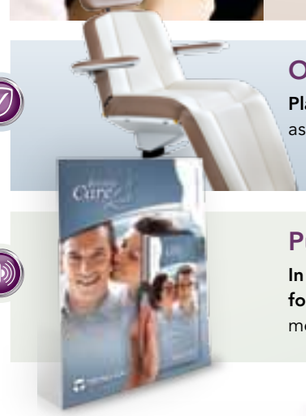
Develop your business

Broaden your working fields beyond the mouth and the lips

Increase the services on offer, that is, not only simple treatments but also complementary services such as dental hygiene and product sales. View beauty in a general sense, extending the focus from the mouth to include the face, as well as consultations on general prevention.

Choose a partner to tackle this business

To start a new project, we must have clear ideas and cooperate with specialized companies that, above all, have extensive knowledge of the dentistry market. Knowing the sector is extremely important as the plan must be placed into the correct medical-dentistry context and be maintained at a highly professional level.



Organise your working environment

Planning the beauty project within a dental surgery is a very important moment, as a new operational and communications structure needs to be organised.

Publicize this side of your business

In a modern society, communication is at the heart of the success of every business, even for professional and medical businesses. Recent deregulation now allows any professional or medical structure to advertise its business.

Tecno-Gaz technologies

Oxis
Oxygen technology

- Oxygenates tissues improving their functionality
- Perfects skin tone and thickness and illuminates the skin
- Reduces dynamic and static wrinkles
- Improves firmness and elasticity

Washing and cleansing the skin 1

Percutaneous infusion using **oxygen applicator** 2

Application of serum using special applicator 3

Oxis Kit products for home use to **extend the benefits of the treatment** 4

Era Transdermal vehiculation technology

- Treatment for dry and sensitive skin
- Toning of face and neck tissues
- Rejuvenation of the face

Peeling/exfoliation of the face with the Bright Skin apparatus 1

Application of the product using the special applicator 2

Products for home use to **extend the benefits of the treatment** 3

Oxis

Oxygen therapy

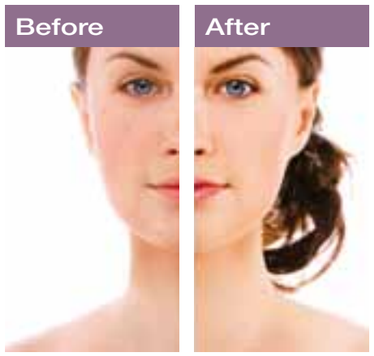
Hyperbaric oxygen at appropriate pressure levels can be used in cosmetic medicine in beauty treatments for the skin. The Oxis range of products uses hyaluronic acid with a fractioned molecular weight for higher effectiveness and, as a leader in marine cosmetology research, also uses Pelvetia Canaliculata (an excellent active ingredient for combating skin ageing). **This synergy leads to nonsurgical treatments, without the use of injections and painless.**

■ **Oxis** Art. 1850E

Frame and click!
Use your mobile phone to get further information about this issue.

The results

The most striking results of hyperbaric oxygen therapy **are concerned with the significant reduction of wrinkles due to better skin** tone, elasticity and thickness (collagen stimulation).



Opening of the cell protein channels leading to increased transfer of active ingredients.

With Oxis, the main active ingredients and oxygen are transferred to the deepest layers of the skin with palpable results.

Ask the expert

Who needs this?

All those who want to set out on the **path of facial beauty within the dental environment.**

Why Oxis?

Because it is an oxygen high pressure high concentration anti-ageing device and an excellent filler.

The great success that this technique has achieved across the world is linked both to the power of the oxygen itself and to the action of the cosmetics carried by this modern technology.

Evolving technology

The technology applied in the cosmetics field is evolving rapidly with new offers constantly appearing on the market. The general trend seems to be towards techniques that are as non-invasive as possible. In the sphere of skin rejuvenation, the latest innovation is the use of hyperbaric oxygen, widely advertised by famous international stars that have used it intensively with very appreciable results.

Oxis

Width	500 mm
Height	1100 mm
Depht	350 mm
Weight	35 Kg
Power supply	220-230 V - 50/60 Hz
Consumption	500 W ca.
Electrical insulation class	I
Graphics interface	Graphics display TFT 10,4" 800x600 with touch- screen
Microprocessor	Intel PXA275
Operating system	MS Windows CE 5.0
Connectivity	RS 232, RS485, USB, Ethernet
Protection fuses	2 fuses 5A - 250V – 5x20 time lags
Environmental conditions for use	Temperatura: 10/40°C Umidità: 15 a 95% Utilizzo: posizione verticale

Oxis - oxygen concentrator

System	Molecular separator with zeolite
Capacity	Up to 8 litres/minute
Oxygen purity	between 90% +5.5% / -3.0% (performance at 21°C and atmospheric pressure)
Output pressure	Higher than 1 bar

OXIS apparatus

Oxygen handpieces
Hyperbaric oxygen treatments in pulsating mode.

Oxygen Nebulisation
Nebulisation and product projection treatments using high velocity hyperbaric.

All apparatus can be sterilized in an autoclave.

OXIS homecare products

The Oxis Kit contains
- **Face fluid**
- **Face emulsion**
- **Eye contour cream**
- **Concentrate**

Era

Deep transdermal application

With Era we tried to optimize the spreading methods to remedy to the limits of the techniques used in the past that is limited concentration of active principle, limited deepness reached in tissues, damaging of tissues due to intensive currents inducted. For these reasons the method represent the state of the art of skin care and treatments, especially in the treatment of cellulite: new and recent studies have been made in different countries with excellent results, representing the future of this new technique that eliminates the use of needles.

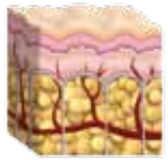
Era Art.1480E

Frame and click!
Use your mobile phone to get further information about this issue.

The results

The most striking results of hyperbaric oxygen therapy are concerned with the **significant reduction in wrinkles due to greater skin tone, elasticity and thickness** (collagen stimulation).

Before	After

Before	After
	

Ask the expert

Who needs this?
All those who want to set out on the path of beauty within the dental industry.

Why Era?
Because it is a **device that bio-stimulates the collagen and fills the tissues,** by using innovative active ingredients.

The patient's experience is ***absolutely pleasurable and without painless***

How does it works

Step 1 - Peeling/exfoliation using Bright Skin

Bright Skin, used as a pre-treatment before ERA, prepares the skin rendering it clean and aseptic and ready to receive the active substances in specific treatments. The Bright Skin software includes numerous treatment programmes based on the type of skin (3 types) matching the ultrasound as required to the galvanic currents.

Step 2 - Transportation of the active ingredients using the special handpiece

The ionization chamber is located inside the handpiece and is a real innovation: here, the processes of osmosis and conductivity of the substances gradually take place. Firstly, the active moisturizing substances (in powder form) are mixed in the handpiece with a conductive gel prepared specifically for ERA.

Step 3 - Home treatments to extend the results of the treatment

ERA, a range of products created specifically for electroporation. They contain a combination of active ingredients, well-researched and up-todate, that prolong and strengthen the results of the treatment. Tecno-Gaz has chosen the best experts in the cosmetics field to offer its clients a rich and effective range of products.

Era

Width	520 mm
Height	1100 mm
Depht	400 mm
Weight	25 Kg
Voltage supply	90 V - 220 V ca.
Working frequency	50/60 Hz
Internal voltage supply	24 Vcc
Max. absorbed power	24 Vcc
Safety class	I BF
Max. voltage output	45 V
Average value current output (R=1K)	20 mA
Working frequency	1760 Hz

Bright Skin

Voltage supply	24 Vcc
Working voltage	5 Vcc
Working frequency	25 KHz
Max. power	0,1 mW

ERA handpiece

Bright Skin (step 1)

Bright skin is an ultrasound device that rejuvenates the skin and prevents ageing of the tissues through the use of ultrasonic waves.

Handpiece for the face (step 2)

- A gradual and non-chaotic transportation of activated substances
- No dispersion and nor spikes in concentration
- Moreover, the handpiece guarantees the high level of hygiene required by health protocols as its stainless steel components can be removed and are all washable and sterilizable.

ERA homecare products

The ERA Kit contains
- **Emulsion**
- **Serum**

Era Oxis Products

Products designed especially for prolonging treatment results

Tecno-Gaz products

The products used have been tested and certified over time according to corresponding European standards. **Tecno-Gaz has chosen a strategy of controlling the prices of its consumer products, allowing all professionals to be able to offer the treatments to a greater number of clients.** Undoubtedly an important and strategic choice that will ensure that every dentist has the chance to make facial beauty treatments an important business aspect for their surgery, ensuring client satisfaction and loyalty.

Beauty in dentistry

We help you to promote this side of your business

In dentists surgeries beauty practices are part of the daily routine and are **becoming very important for the prestige and profitability of the surgery.** Personal care and beauty are vital elements of modern society and caring for one's teeth is an essential part of this context, in particular everyone's expectations of having white and healthy teeth. White teeth bring luminosity to your face and to your smile, providing a perception of cleanliness, well-being, pleasantness, increasing a person's self-esteem. **The new techniques give everyone a chance to have whiter teeth and to be able to improve their appearance. This is why whitening is a technique that dentists must publicize among their clients, as by practising this system the business of the surgery is fuelled and client satisfaction and happiness is created.** Creating and giving a beautiful smile is undoubtedly a positive and concrete action that generates definite loyalty and prestige for the surgery.

Oxis kit

Great success is being achieved across the world with this technique. This is linked to the power of the oxygen itself as well as the action of the cosmetics transferred through this technology.

The Oxis Kit contains

- Face fluid
- Face emulsion
- Concentrate
- Eye contour cream

Era kit

ERA, a range of products created specifically for electroporation. They contain a combination of active ingredients, well-researched and up-todate, that prolong and strengthen the results of the treatment. Tecno-Gaz has chosen the best experts in the cosmetics fi eld to offer its clients a rich and effective range of products.

The Era Kit contains

- Emulsion
- Serum

Get the maximum return on your investment

In a modern society, communication is at the heart of the success of every business, even for professional and medical businesses. Recent deregulation now **allows any professional or medical structure to advertise its business** within normal ethics rules. **This freedom allows these businesses to make their own structures and the services offered more visible.**

Ask the expert

Who needs these?

All dentists that use beauty treatments for the face.

Why Tecno-Gaz products?

The products used have been tested and certified over time according to corresponding European standards. Quality and safety for the beauty of your face.

Rania

Organising your work space

Multifunctional reclining armchair/bed made of galvanized steel, completely enclosed with abs carter ensuring safety and elegance. The unit is equipped with three 24V cc actuators allowing the client to remain comfortably seated in the chair while it is being suitably positioned. **The unit is equipped with pedals to regulate the back rest and the leg rest** as well as the reclining angle and height (trendelemburg).

FACE AND BODY TREATMENT › DIAGNOSTIC EXAMINATION › COSMETIC SURGERY

Responds to all your operational needs

Ask the expert

Who needs this?

All those who want to begin offering facial beauty treatments within the dental environment.

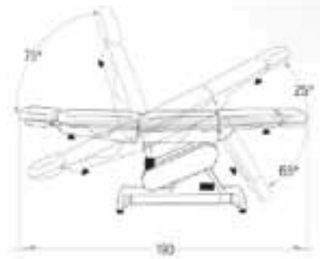
Why Rania?

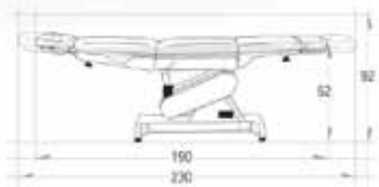
RANIA is a chair designed for beauty treatments, with a “positive” visual impact.

- Rania with **pedal control**
  Art. 1490E
- Rania with **button control**
  Art. 1490E2
- Rania with **button and pedal control**
  Art. 1490E3

Frame and click!
Use your mobile phone to get further information about this issue.

Rania





Various - surgery

Improve your efficiency

Medical chair, liquid heater and mixer for alginates

Thea
page 120

Bridge table and surgical trolley
page 122

Sphera
page 123

Algimix
page 124

Curing lamps

B-Max
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Focus
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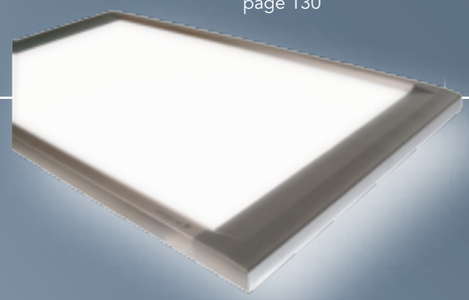
Radiology

X-ray view boxes
page 132



MediCanvas
page 130

Ray
page 133

Overall project

As well as its many product lines, Tecno-Gaz offers a series of small pieces of equipment designed to improve and complete operators' everyday work.
All the devices have been created in order to improve performance and to rationalise surgery times and methods.

Devices that improve your daily working life

In order to complete the basic equipment that a dental surgery must have **Tecno-Gaz s.pa. has a wide range of indispensable products for every operator.**

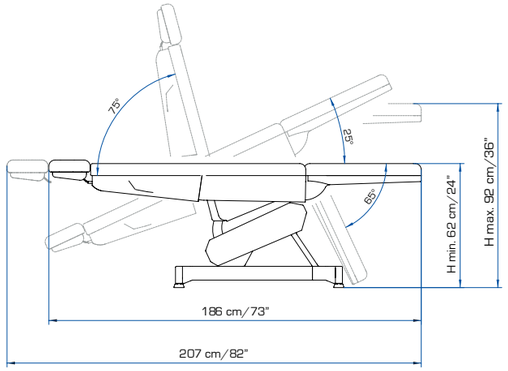
Thea

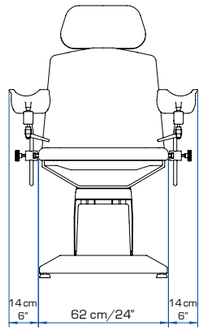
Medical chair

Chair with complete electrical adjustment with 4 electrical actuators, standard pedal or keyboard control (optional), complete with an anatomic mattress with an adjustable and removable head and guide support accessories.

Thea

Voltage	V 230 AC
Frequency	50Hz
Absorption	0,70 Amp max.
Net weight	73 kg
Max. load	200 Kg





Optimum efficiency

Thanks to the completely electrical adjustment of all movements, Thea is the ideal ally for every physician wanting to work in the very best conditions and **welcome his patients with style.**

Accessories

Art.1491E	Stainless steel tray with support
Art.1492E	Pair of medical armrests with sample joint
Art.1493E	Pair of medical armrests
Art. 1494E	Stand holder
Art. 1495E	Cloth holder
Art. 1496E	Steel roll holder

Ask the expert

Who needs this?

All those who want to practise surgery and organise their activities in the most rational way.

Why Thea?

This is a very flexible and ergonomic chair, with pedal or keyboard control, with options to move and insert accessories.

Chair **mod. Thea** with **pedals**

Art. 1490E6

Frame and click!
Use your mobile phone to get further information about this issue.

Bridge table

A bridge table created in 18/10 stainless steel, with adjustable height, characterised by a broad solid surface, allowing the physician to have all the materials he needs within reach in order to work better, without the help of further surfaces. The surgeon also has the chance to position the work surface over the patient's chest, eliminating the risk of instruments falling accidentally. The bridge table is electro-polished by immersion in order to guarantee lower bacterial adhesion. Two of the 4 wheels are fitted with brakes.

Bridge table

Min. Height	95 mm
Max Height	155 mm
Tray dimensions	600 x 900 mm
Weight	15 Kg

Instrument table

The hydraulic table is created entirely from stainless steel, with 4-spoke cast aluminium feet. Completes the equipment of every dental operating room. The hydraulic steering column allows for quick adjustment of the height of the work surface. The tray allows for the storage of a large number of surgical instruments. The table is electro-polished by immersion in order to guarantee lower bacterial adhesion.

Instrument table

Min. Height	89 mm
Max Height	124 mm
Tray dimensions	730 x 470 mm
Weight	31,5 Kg

Ask the expert

Who needs these?

All medical surgeries that carry out surgery.

Bridge table

Art. 1498E

Frame and click!
Use your mobile phone to get further information about this issue.

Instrument table

Art. 1499E

Frame and click!
Use your mobile phone to get further information about this issue.

Sphera

Warming device for irrigation liquids

Heating anesthetics and irrigations liquids improves the patient's treatment and comfort, reducing pains and unpleasant sensations. Tecno-Gaz has realized SPHERA a double temperature device, electronically controlled with microprocessor and visual signals.

SPHERA is equipped with a double heating:
- 37°c for irrigation liquids or composites
- 55°c for anesthetics

Warmed composites are more mouldable and improve the performances of photo polymerization. **SPHERA is realized** with 4 housings for syringes, 1 housing for composites, 2 housings for tips.

Benefit
- **Improve patient's comfort**
- **Pain reduction**
- **Less unpleasant senstations**

Sphera

Width	180 mm
Height	175 mm
Depht	150 mm
Weight	1,5 Kg
Main voltage	AC 220V 50/60Hz
Power absorption	50 W

Ask the expert

Who needs this?

All dental surgeries.

Why Sphera?
- It has been created to hold all materials thanks to the specially designed compartments
- It has a dual temperature setting at 37°c or 55°c
- Fitted with spy control function and temperature reaching
- Extremely attractive and small
- Extremely competitive price

Art. 4100R
Sphera

Frame and click!
Use your mobile phone to get further information about this issue.

Algimix

Alginate mixer

Tecno-Gaz presents the new system ALGIMIX a new and exclusive device ideal and indispensable for every dentist's surgery.

Algimix has a special patented accelerator built on the mixing bowl cap, that assures an excellent result. The alginate is mixed quickly and constantly, this procedure consents to avoid air bubbles and brings the product uniform, harmonious and with a perfect viscosity. You will have impressions with a surface smooth like the glass, **the reproductions of plaster moulds and reconstructions will be perfect.**

Algimix is:
- simple
- silent
- **programmable for every alginate**
- rich of accessories

Benefit

- **constant repetitiveness of the result,** eliminating any human component
- **simple and clean** process
- **you will increase the quality** of the process
- **you will save time**
- **you will reduce the waste** of alginate

Ask the expert

Who needs this

All dental surgeries.

Why an alginate mixer

There are different kinds of alginates with different features, however the preservation of the features of each product depends on a correct and adequate mixing. The quality of the impressions depends on the system of mixing used.

Art. 4090S
Algimix

Frame and click!
Use your mobile phone to get further information about this issue.

Using situation

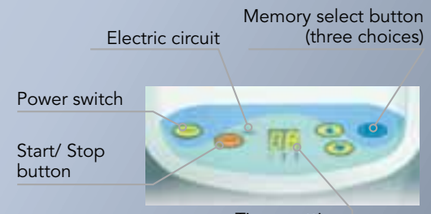
Humidity:	35~85%	RH
Temperature	-10~50	°C

Algimix

Width	240	mm
Height	300	mm
Depht	280	mm
Weight	15,5	Kg
Main voltage	AC110V 50/60Hz AC 220V 50/60Hz	
Power absorbition	1400	W
Timer	1~16	sec.
Memory	3 (pre-installed setting: 8,10,12 sec.)	
Revolutions	2900~3600	r.p.m.

Measurement v.s. Timer Setting

Alginate	Mixing time	
1 measure	6 ~ 9	sec.
2 measure	7 ~ 10	sec.
3 measure	8 ~ 12	sec.
4 measure	9 ~ 13	sec.



How does it work?

Patent accelerator built on mixing bowl cap.

Measure the correct amount of alginate and water to be used.

Close tightly the cap of mixing bowl.

Place it into the well of ALGIMIX mixer.

Press down the key "ST/STOP"to star running.

Take out the mixture by the spatula for impression.

Front visual result of stirred material.

B-Max

Curing light

Ask the expert

Who needs this

All dental surgeries.

Why an LED curing lamp?

To be able to cure all materials in very short times and to use the right level of wave power as to avoid retraction of the material being treated.

Why choose the B Max lamp?

Because it is an extremely high powered lamp that is modular, ergonomic and has unique characteristics.

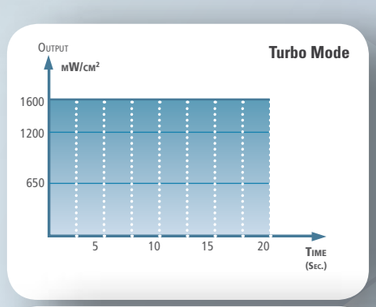
Frame and click!
Use your mobile phone to get further information about this issue.

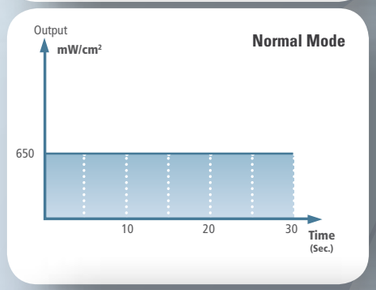
Art. 4700S3
B-Max

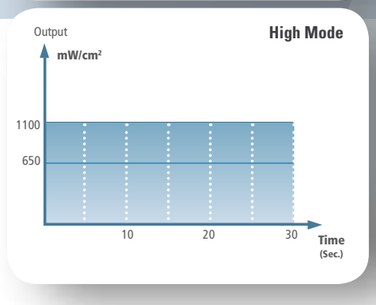
B-Max is a curing light with LED technology. Light, easy to use, wireless.
B-Max exploits the new led technology, this ensures a focused, cold and with low infrared outlet high light emission with 450/480 nm spectrum. B-Max ensures a light emission with 1600mW power. B-Max includes a wireless handpiece with a wide colour display, long lasting lithium battery, easy to move. Control panel for time setting, program setting, start of cycle. B-Max has 6 programs that can be selected with different power, **B-Max is supplied with shaped support with built-in battery charger and led indicator.**

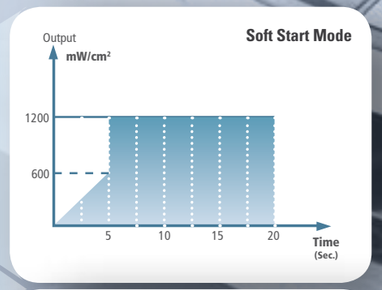
Benefit

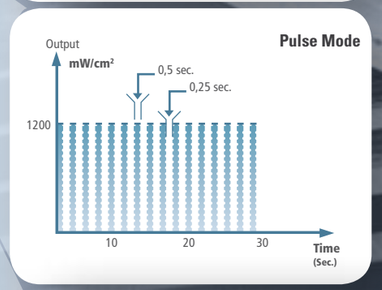
light emission with power of **1600 mW**

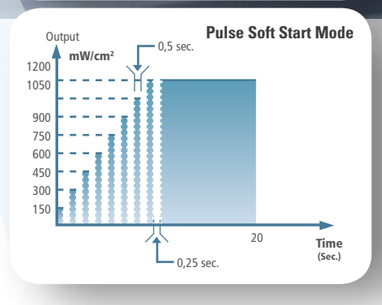












B-Max

Frequency (feeder)	5 V
Supply (batteries)	3,7 V Lithium Ion
Light source	High power LED
Radiation wavelength	410~490 nm
Lighting intensity	max 1600 mW/cm (±10%)

Handpiece

Dimensions	182x95x22~23 LxAxP
Weight	170 gr

Feeder

Dimensions	170x180x145 LxAxP
Weight	240 gr

Accessories

User manual
Art. SMMA010

Battery charger base
Art. SLPA 186

Batteries
Life: used in High Mode: 500-600 times, 10 seconds/treatment.
Art. SLPA 188

Optical fiber 11mm
Art. SLPA 191

Optional

Anti-glare screen
Art. SLPA 190

AC Adaptor
Art. SLPA 187

Focus

Curing Light

FOCUS is an innovative curing lamp, that has exclusive solutions to make the use and the sterilisation easier.

'The quality of light is different'

Focus has a special lens that ensure a quick and complete polymerization on all the dental structure.

Automatic Focus

Focus can polymerize various composite masses without replacing the fiber optics, but by moving the guide-cap closer and further away without losing intensity.

Benefit

light emission
strength equal to **1400 mW**

Ask the expert

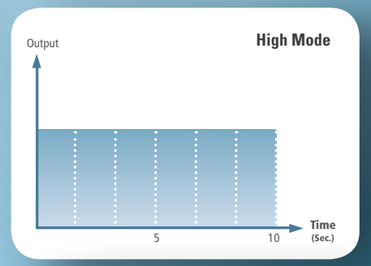
Who needs this?
All dental surgeries.

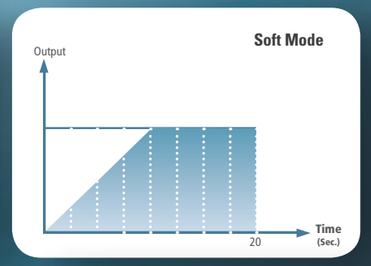
Why an LED curing lamp?
To be able to cure **all materials in very short times** and to use the **right level of wave power to avoid retraction** of the material being treated.

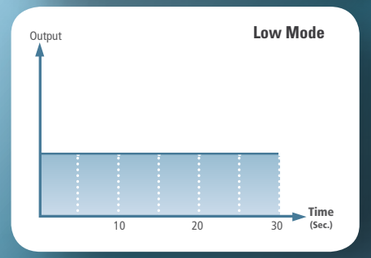
Why choose the Focus lamp?
Focus can cure various composite masses without replacing the fiber optics, but by moving the guide cap closer and further away without losing intensity.

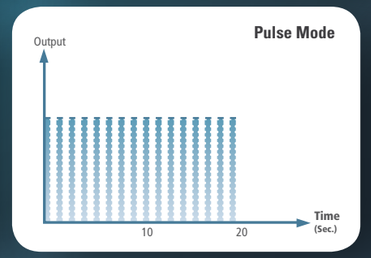
Frame and click!
Use your mobile phone to get further information about this issue.

■ Art. 4800S
Focus









Operating methods

- **High Mode**
  High-intensity rapid curing
- **Soft Mode**
  Safe low-intensity curing.
- **Low Mode**
  Safe low-intensity curing.
- **Pulse Mode**
  Special mode for avoiding contractions.

Unique characteristics

FOCUS is an innovative curing lamp that relies on exclusive solutions that facilitate its use and sterilization.

Melody
Various melodies accompany the user and stop the device being used incorrectly.

LCD screen
Indicates the status of the device.

Angled handpiece
The angled handpiece is easy to manoeuvre.

Changeable battery
- Easy-to-Change battery
- Enough battery capacity
- Rechargeable battery alone.

Easily changeable
The guide cap protection can be easily changed.
3 protections are included in the package.

Sterilizable
Prevents cross infections and guarantees rapid and effective curing.

330° swivel
It is adjustable according to user's favorite angle.

Focus

Light source	High power LED
Wave length	440-490 mm
Guide cap protection	Autoclavable
Supply Battery	3,7 V lithium-ion battery

Accessories

Battery charger base
Art. 4801S

AC Adaptor
Art. 4804S

Battery
Art. 4802S

3 hoods
Art. 4803S

MediCanvas

TFT-LCD MEDICanvas X-ray view boxes

Tecno-Gaz MediCanvas X-ray view boxes use TFT-LCD technology and are at the top of the market as regards quality, aesthetics and technology.
A prestigious product that will not only improve your operating efficiency, giving your surgery added value, but that also has a striking aesthetic impact.
All MediCanvas X-ray view boxes are already fitted out for wallmounting, and items 7072-N 7074-N may be used standing on the table, with the aid of the appropriate support. These negatoscopes are equipped with a device that allows **automaticFAS turning on and turning off when you insert the x Ray.**

Advantages

Excellent light uniformity
Computer screen technology is used to provide total light **uniformity and this facilitates the reading of the X-ray and avoids the operator straining their eyes.**

Easy X-ray reading
MediCanvas uses CCFL technology **that guarantees the emission of cold blue light at 8.600° Kelvin, allowing for better definition when consulting X-rays.**

Reduced eye fatigue
The CCFL system uses a frequency of 40,000 times per second. **This method avoids any movement of the lamp,** unlike in traditional X-ray viewing boxes, **noticeably reducing eye fatigue.**

Long-life lamp
The MediCanvas lighting system **lasts for approximately 10 years without specific maintenance,** thanks to the CCFL system that **ensures time and cost savings.**

MediCanvas design and quality
MediCanvas X-ray viewing boxes are available in 4 different sizes, designed for every need. The main distinguishing feature of these products is their reduced thickness that varies from 24 to 39 mm. Their absolutely extraordinary aesthetic impact and their presence provides a very professional look to any environment.

Ask the expert

Who needs this?
All dental surgeries.

Why MediCanvas X-ray viewing boxes?
An innovative product that makes use of technology to improve your work. A pleasantly designed, **high-quality product.**

Frame and click!
Use your mobile phone to get further information about this issue.

Art. 7072-N

Art. 7074-N

Art. 7076-N

Art. 7078-N

Optional

Frame 7077-N

Counter support for MediCanvas X-ray viewing box Art. 7072-N

Frame 7079-N

Counter support for MediCanvas X-ray viewing box Art. 7074-N

X-ray viewing box MediCanvas with TFT-LCD technology

Frame 7072-N		
Width	498	mm
Height	482	mm
Depht	28	mm
Viewing Ares 14x17"		
Width	356	mm
Height	423	mm

Frame 7074-N		
Width	854	mm
Height	482	mm
Depht	28	mm
Viewing Ares 28x17"		
Width	711	mm
Height	423	mm

Frame 7076-N		
Width	1230	mm
Height	482	mm
Depht	39	mm
Viewing Ares 43x17"		
Width	1087	mm
Height	423	mm

Frame 7078-N		
Width	1606	mm
Height	482	mm
Depht	39	mm
Viewing Ares 58x17"		
Width	1463	mm
Height	423	mm

X-ray viewing boxes

Pleasant and innovative design

ART. 7085/N: formed from unbreakable material, it features a simple and rapid mounting device for radiographs. Its design allows it to be used either wall mounted or on the workbench. Illumination is by means of a flourescent lamp (6500° K) fitted to an unbreakable opaline diffuser.

Art. 7086N2: painted steel structure and stainless steel profiles model. Fluorescent cold light (6.500°K). Unbreakable white monochromatic diffuser with supporting device.

Conventional Tecno-Gaz X-ray view box

Frame 7085/N		Viewing Ares	
Width	456 mm	Width	400 mm
Height	379 mm	Height	300 mm
Depht	55-95 mm		

Frame 7074-N		Viewing Ares	
Width	832 mm	Width	800 mm
Height	456 mm	Height	425 mm
Depht	140 mm		

Ask the expert

Who needs this?
All dental surgeries.

Why MediCanvas X-ray viewing boxes?
Because they respond to various needs and are split into **two extremely versatile models that can be easily inserted into your surgery.**

Frame and click!
Use your mobile phone to get further information about this issue.

- Art. 7085/N
  Plastic material
- Art. 7086N2
  Varnished steel

Ray

Dark room

Ray is a dark room with a modern design that is ideal for the manual development of small films.

Ray is an ergonomic, **practical and attractive device,** that has been created for ease of use thanks to its special shape. **Ray has been created to be conveniently placed against a wall, t**aking up very little space. **Its large window allows for a wide field of vision** and the compartments for the hands have been designed at an angle that enables natural movement.

Ray is supplied with:

- **1** container-holding **support**;
- **4 containers** for liquids (developing-washing-fixing-washing);
- **2** X-ray film holding **tweezers.**

Ray

Width	554 mm
Height	350 mm
Depht	340 mm

Ask the expert

Who needs this?
All dental surgeries.

Why a dark room?
To be able to develop X-rays in a simple and traditional way.

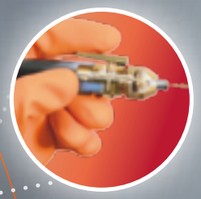
Why Ray?

- Is equipped with four containers for fixing and rinse
- Is equipped with a big window that enables an excellent operation view.
- Has an ergonomic and pleasant shape
- Economic, complete, rational

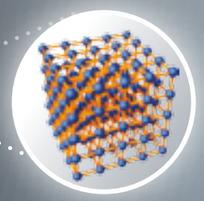
Frame and click!
Use your mobile phone to get further information about this issue.

- Art. 7088-N

Odontotechnical laboratory



Sand blasters



Die-casting machine

ASM30
Automatic System
page 142

Other useful products

SkyLab
page 138

Nybra
page 140

Universal Welder
page 146

Bunsen
page 146

Overall project

The laboratory has been Tecno-Gaz's prime mission and our objective remains that of offering you innovative and unique technologies that you can find in our range of products. Our policy is that of continuously updating and developing our products that are brought in line constantly with new technological evolutions.

Sand blasters

Skylab e Nybra

The sandblaster is one of the most used instruments in the odontotechnical laboratory and for this reason it is one of the prime pieces of equipment that every operator should invest in carefully. The sandblaster must be appropriate and technologically evolved, otherwise it will not operate in accordance with legislative decree 626/94 in terms of protecting workers, and could create environmental damage that would be dangerous to its operators.

The main characteristics of a modern sandblaster are: ergonomics, efficiency, operational flexibility and compliance with standards. It is important to choose a model that has plenty of accessories, safety devices and cutting-edge solutions. All this ensures correct functionality, ease of use, compliance with current regulations and the protection of yourself and your colleagues.

Ask the expert

Who needs this?

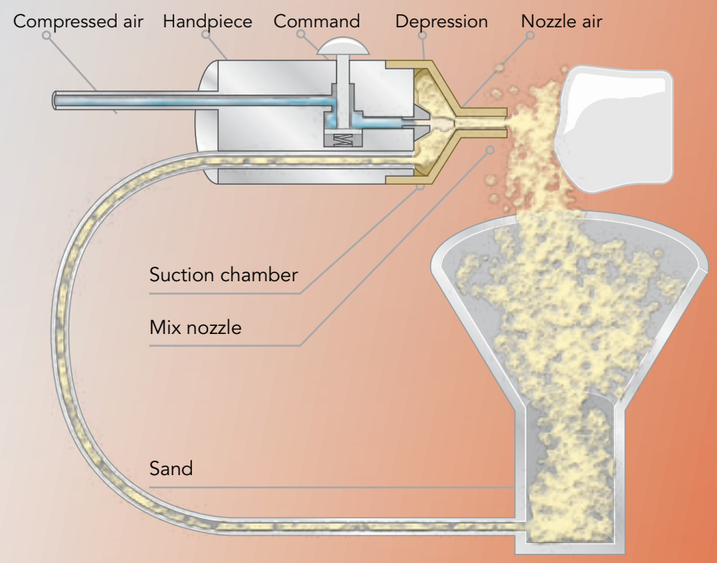
All dental technicians.

Why a sandblaster?

For sandblasting all products.
The sandblaster must comply with precise regulations, it must not release smoke or dust into the environment and it must guarantee operator safety, it must be efficient and flexible.

Venturi system: no clogging problems

Traditional sandblasters have sand containers under air pressure and this solution causes the sand to clump together, which often leads to clogging and obstruction. SKYLAB and NYBRA have eliminated this problem by adopting a sand suction system using the VENTURI method. This solution allows you to avoid having pressurized sand tanks and to never have air mixing with sand anywhere other than at the tip of the handpiece. This method ensures maximum efficiency, avoids blockages and clogging and ensures very low sand consumption.

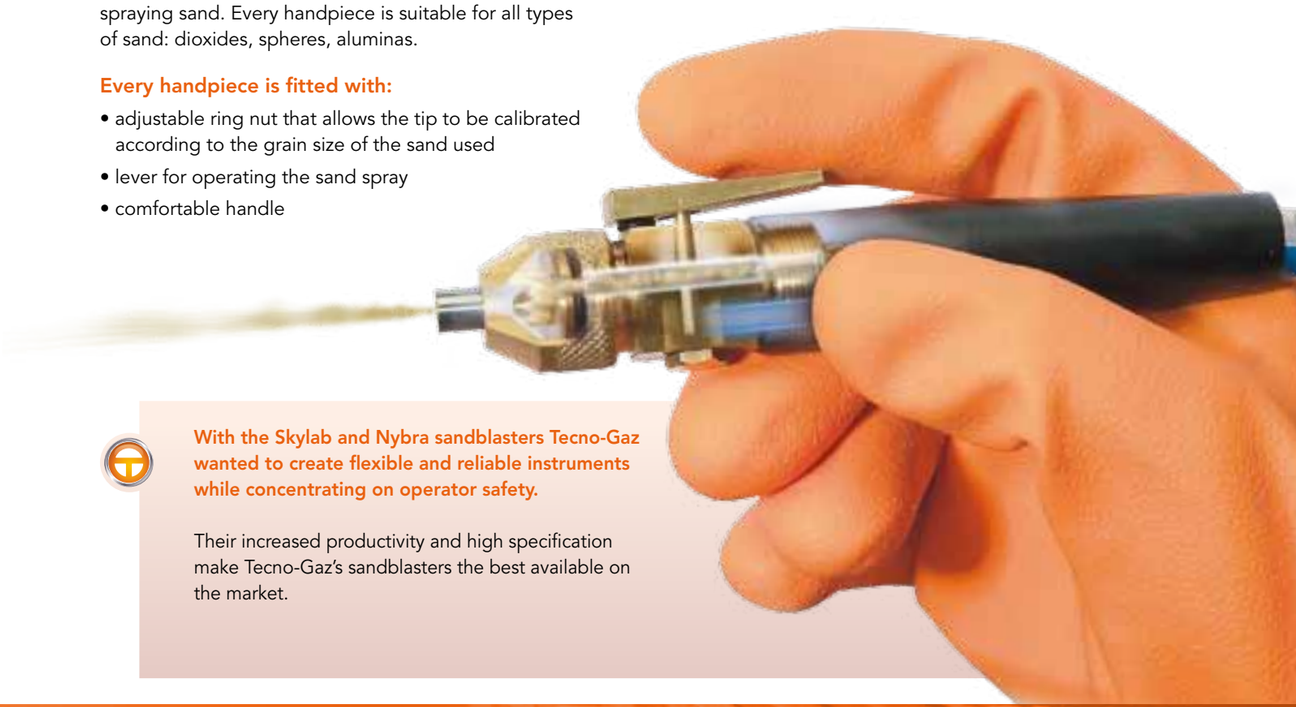


Special handpieces for sand spraying

Each sandblaster cabinet is fitted with a handpiece for spraying sand. Every handpiece is suitable for all types of sand: dioxides, spheres, aluminas.

Every handpiece is fitted with:

- adjustable ring nut that allows the tip to be calibrated according to the grain size of the sand used
- lever for operating the sand spray
- comfortable handle



With the Skylab and Nybra sandblasters Tecno-Gaz wanted to create flexible and reliable instruments while concentrating on operator safety.

Their increased productivity and high specification make Tecno-Gaz's sandblasters the best available on the market.

Skylab

Three sandblasters in one!

Dental technicians nowadays use many types of sand, making it inconceivable to use "noble" polishing sands in a cabin where heavy aluminas are used. Pollution and cross contamination can create problems during the various working phases. **This is why Tecno-Gaz wanted to create the first sandblaster with 3 independent cabinets. THREE cabinets make it possible to use aluminas, spheres, dioxides and other sands, keeping each type of sand for a specific cabinet. This allows you to be certain about the purity of the sand and to avoid any kind of pollution.**

Each cabinet has totally independent controls:

- adjustment of the air pressure
- pressure display through the pressure gauge
- suction activation
- self-contained lighting
- self-contained sand spraying

Inside each cabinet there is:

- an air gun for cleaning the handmade products
- handpiece for sand spraying
- sieve for filtering the sand
- plug for dividing pure sand and used sand
- steel object holder grill

Odontotecnic Laboratory

Ask the expert

Who needs this?

All dental technicians.

Why Skylab

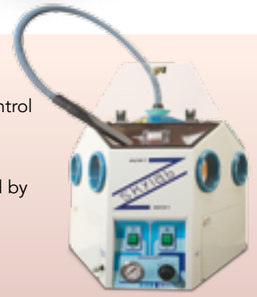
For sandblasting all products. Sandblasters must conform to precise regulations, they must not release smoke or dust into the environment and must guarantee operator safety, they must be efficient and flexible.

Frame and click! Use your mobile phone to get further information about this issue.

Art. 4500/S
SkyLab

Unique characteristics

Dual function integrated suction



The sandblaster is fitted with integrated dual function suction, with an electronic control to adjust and manage it. **The suction has been designed to fulfil two roles:**

- suction of the smoke and dust produced during the working process, protecting the operator from inhaling dangerous smoke and complying with the obligations required by the directives for the protection of workers:
- suction and removal of sand accumulated in the cabinets. This function is activated through the use of a special lance with a pipe, supplied with the machine.

Skylab revolves through 240°

SKYLAB can be located in the middle of the room and used by three staff members at the same time, or it can be located on any dental laboratory bench and used by one single operator. All the cabins can be used as SKYLAB is equipped with a system that allows the equipment to be rotated with a lock at each individual position. The equipment is fitted with a positioning support, specially designed to be placed on all dental laboratory benches.

Air filters

SKYLAB is supplied with 2 filters:

- primary filter used to contain the dust sucked out during sandblasting and to collect the sucked out sand. Cod. 4517-S
- secondary filter that serves to filter the air being discharged, that allows the discharged air to be cleaned. Cod. SSKA230.

Nybra

Art. 4600/S
Nybra

Frame and click!
Use your mobile phone to get further information about this issue.

Sandblaster designed to use two different sands

Innovative and technological, NYBRA has been created for all those who have to sandblast handmade prosthetics and require rationality, practicality and precision. NYBRA has been designed to adapt to the demands of the operator, through changes and customizations. Thanks to a dual-section board it is possible to manage the lighting, suction and dual pressure of the process. NYBRA does not have sands under pressure and the sand jet is achieved through depression, exploiting the Venturi method. This method significantly reduces the air consuption, prevents blockages and the collection of humidity in the sand. NYBRA is equipped with an efficient twin action method of aspiration for removing fumes and dust. The first sucks silently during the working phase, the second allows sand to be removed using the special lance supplied. NYBRA comes complete with a filter sack to hold back the sucked dust and an absolute filter to guarantee the total purification of the air discharged into the atmosphere.

Unique characteristics

Dual function integrated suction

The sandblaster has been fitted with dual-function integrated suction, with an electronic control to adjust and manage it.

The suction has been designed to fulfil two roles:

- suction of the smoke and dust produced during the working process, protecting the operator from inhaling dangerous smoke and complying with the obligations required by the directives for the protection of workers.
- suction and removal of sand accumulated in the cabinets. This function is activated through the use of a special lance with a pipe, supplied with the machine.

Nybra: sandblaster with two independent sand tipes

NYBRA is a sandblaster with two completely independent controls and adjustments for different type of sand. A simple intuitive board controls all the functions:

- air pressure adjustment handpiece 1 and handpiece 2
- pressure display through pressure gauge
- switching on and adjustment of suction
- switching on cabin lighting

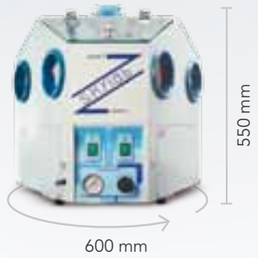
Air filters

NYBRA is supplied with 2 filters:

- primary filter used to contain the dust sucked out during sandblasting and to collect the sucked out sand. Code 4517/S
- secondary filter that serves to filter the air being discharged, that allows the discharged air to be cleaned Code SSKA230.

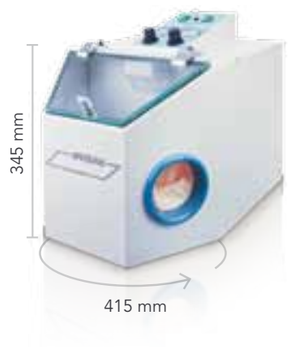
SkyLab

Diameter	600 mm
Height	550 mm
Weight	40 Kg
Voltage	230V - 50/60 Hz
Air consuption	200 NL/min.
Absortion	1 Kw



Nybra

Diameter	415 mm
Height	345 mm
Depht	530 mm
Weight	25 Kg
Voltage	230V - 50/60 Hz
Air consuption	200 NL/min.
Absortion	1 Kw



Peculiarity

Glass panels with protection
To prevent the glass panels from being damage by the abrasive action of the sand, they are protected with removable, easy-to-replace, adhesive acetate film.

Easy glove replacement
The gloves can be easily and quickly replaced, since the retaining ring nuts are quick fitting. This solution avoids complicated operations and the use of tools.

Sealing gaskets Art. SSKA228
The gaskets fitted between the glass and cabinet structure are produced with special rubber foam in a single piece to guarantee a perfect seal and containment of all the micropowders.

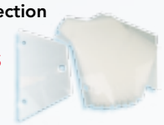
Anti glare lights
The lights inside each cabinet are isolated and protected and are fitted with a special anti-glare parabolic reflector that safeguards effect the operators.

Active safety devices for the operators
The work cabinet is equipped with a special safety system, that allows the machine to be switched on and the sand to be sprayed only when the glass panel is completely closed.

Accessories

Gloves (pair)
Art. CM61001

Glass panels protection
(pack. 12 pcs.)
SKYLAB Art. 4516/S
NYBRA Art. 4514/S



Filters

Primary sack filter
(pack. 10 pcs.)
Art. 4517/S

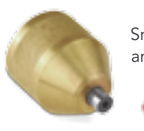
Absolute filter
SKYLAB Art. SSKA230

Absolute filter
NYBRA Art. SNYA230

Nozzles

Large nozzle for Alumina MIX 3,5 mm
Art. 4526/S

Large nozzle for Dioxide Quartz MIX 2,5 mm
Art. 4528/S



Small nozzle for Dioxide and Quartz MIX 1,5 mm
Art. 4530/S

Small nozzle for Quartz MIX 1 mm
Art.4531/S

Large nozzle for Bioxide MIX 1,5 mm
Art. 4532/S

Odontotechnical laboratory

ASM 30

Die-casting machine

ASM 30 casting machine is a new generation, fully Automatic pressure vacuum casting machine. The entire casting process is made up of very simple steps: vacuum production, inverting, compression and cooling, with no human intervention required. Thanks to its special resistance, it can melt any type of alloy, precious, Palladian, base, semi-base as well as alloys containing titanium. ASM 30 is equipped with an SD card for recording and filing casting data.

New

New software for total machine control

- Intuitive menus and controls
- Multifunctional switches
- Clear information
- Large display

Unique characteristics

Following casting temperature requirements

Keeping control over the casting temperature is the most important requirement for maintaining the metallic features of the alloy. Compliance of the casting data avoids the sublimation of the low melting point metals contained in the alloy. A metal melted at the appropriate temperature will have all the features prescribed by the manufacturing company, otherwise modifications to the metallic structure may occur and create technical changes and cause problems during the subsequent processes.

Casting with omnidirectional pressure

Dental alloys are composed of different metals, each with their own density. By using centrifugal injection techniques a monodirectional pressure will be produced, which first introduces the high density components into the cylinder followed by the others. **With Tecno-Gaz pressure die-casting systems, the metal enters the cylinder statically, then constant omnidirectional pressure occurs on the cylinder, allowing the metal to be perfectly layered.**

Vacuum casting

To achieve high mechanical resistance and accuracy the casting must take place in an air free environment. This ensures that air does not get into the product, guaranteeing non-porous alloy casting.

Ask the expert

Who needs this?

A qualsiasi laboratorio odontotecnico.

Why ASM 30

- Working temperature of 1600°
- Works fully at low voltage
- It is fitted with a printer that certifies the casting cycle.
- It has a reserve air system that ensures the success of the casting, even if the compressor is interrupted during supply.

Art. 6185F
ASM30 without Argon

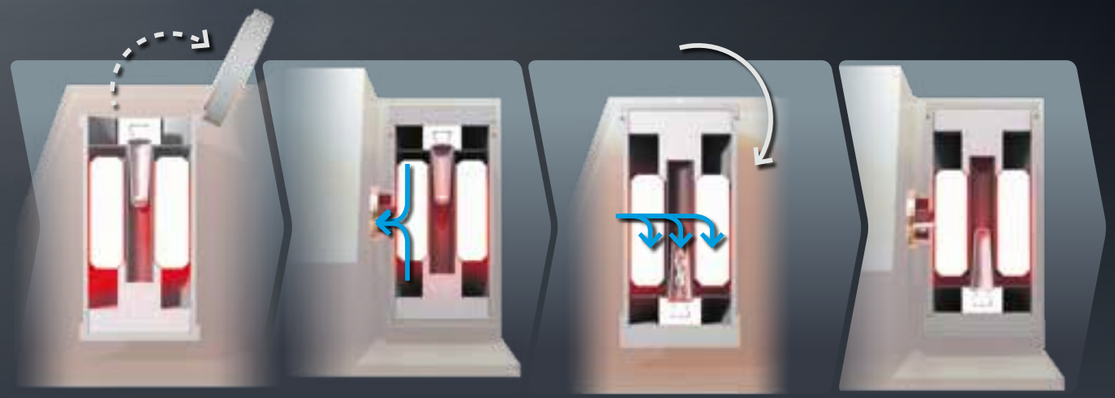
Art. 6185FA
ASM30 with Argon

Frame and click!
Use your mobile phone to get further information about this issue.

Odontotecnic Laboratory

The Tecno-Gaz die-casting system

Tecno-Gaz casting machines are the logical evolution from traditional die-casting machines.
The Tecno-Gaz die-casting system is very advanced and thoroughly tested. All the systems used and the components included have passed functional and operational tests over 4 years.
Tecno-Gaz die-casting machines ensure an entirely, automatic process throughout the casting cycle.



1

The first phase is heating, whichis carried out by irradiation. A resistor transmits heat to the crucible, which in turn then heats the mass that is being cast. The temperature is constantly monitored and controlled thanks to a sophisticated system with cross-reference controls between the electronic, resistance, electrical and thermocoupling areas.

2

The second phase is the vacuum production. After the crucible has been introduced and the casting chamber has been closed, the casting machine will begin the vacuum phase, which is also controlled and managed by the microprocessor system.

3

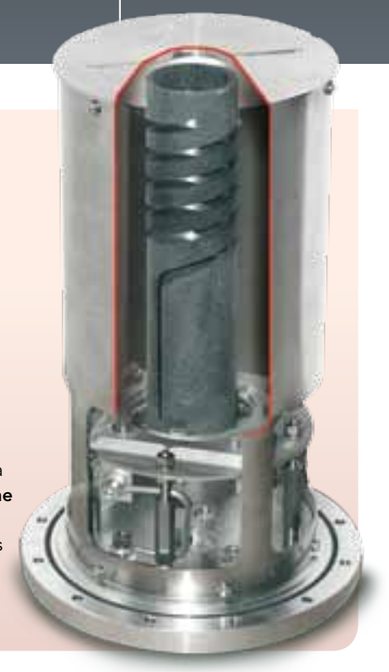
The third phase is inversion and compression, followed by the molten metal falling statically into the cylinder and automatically controlled compression, which will propel the metal inside the cylinder. This process produces a vacuum casting, with maximum omnidirectional compression, ensuring:
- consistent results
- perfect edge closing
- thorough protection of the metallurgic features
- alloy saving

4

The fourth phase is that of the automatic cooling of the metal through enforced immobilisation. The muffle will then return to its original state.

Increasingly improved efficiency and performance from the heating component

This is the core of the entire die-casting machine, a decisive component on which Tecno-Gaz has concentrated its investments. The heating component has undergone various updates over the years and has now attained its maximum level of technical efficiency and reliability. Our heating components have always been extraordinarily successful at melting base metals, chrome cobalts, steel etc...., but now we can also guarantee long life and absolutely durability during use and resistance to thermal stress. This is a combination of chemical and mechanical technology that has required in-depth studies by various companies who have contributed to the projects and the attainment of an extraordinary final result, both in terms of service and reliability. **All the electrical contacts are handled by an aluminium rod system, that unlike normal electrical cables, avoids expensive cooling systems and regular maintenance.** The resistor has a safe set-up system, designed to absorb shocks and not to yield at high temperatures. **The heating element is formed of a single closed block containing the resistor, isolated by a ceramic muffler that ensures its isolation and protection.** The lower part contains the connections, blocks and the muffler fixing system. The upper part contains the compartment for the insertion of the crucible.



ASM 30

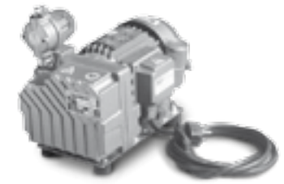
Width	550	mm
Height	630	mm
Depht	600	mm
Weight	115	Kg
Main voltage	230V - 50/60	Hz
Air pressure	6	bar
Vacuum	0,7	bar
Temperature	0 - 1600	°C
Cylynders' height	60	mm
Power absortion	3,5	Kw

Photo gallery

Casting chamber

Accessories

SD card as standard
The die-casting machine is fitted with an SD Card as standard. All the data relating to the casting cycle is archived on the SD card. This device is indispensable for a computerised archive of data relating to the operation of the equipment.



Vacuum pump Art. 6081-F2

In compliance with EC directives, the casting machines are equipped only with Tecno-Gaz vacuum pump.

Support cabinet Art. 6047-F

The cabinet is an important accessory because it has been specially designed to display the inside of the pot. The cabinet is equipped with pot-holders, pump housing and accessories shelf.

Spare parts

Crucibles
The crucible is an essential component for a die-cast casting machine, since it is the element that ensures correct irradiation and heating of the mass to melt. A non original pot can damage the heating element beyond repair or cause quality and casting problems.

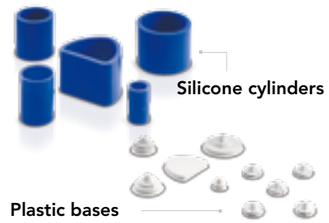
Steel cylinders
The cylinders are made from special stainless steel and are 60mm tall. They are available in different measurements.

Rubber bases

The rubber bases have been designed to host the air injection channels and the forced positioning slot for the crucible. They are available in different measurements, corresponding to the cylinders.

Free expansion technique

The die-casting machine can be used with free expansion technique. We have created special silicon cylinders and rigid plastic bases.



Odontotecnic Laboratory

Universal welder

Micro welder

It is a micro-welder for dental technicians and goldsmiths. Equipped with wheels and with minimum overall dimensions, it can easily be positioned in limited environments. The two bottles (oxygen, L.P.G.) can been recharged, do not require periodic overhauling and are in compliance with laws currently in force. Simple and ergonomic, UNIVERSAL WELDER is equipped with a bottle-carrying trolley, rechargeable steel bottle for oxygen (5 LT.), rechargeable steel bottle for L.P.G. (3 LT.), pressure reducers with explosion-proof safety valve. **Case containing UNIVERSAL handgrip, 4 welding tips with different diameters (0.3 mm, 0.75 mm, 1 mm, 2 mm), gas oxygen tubes with couplings.**

Accessories

Gas, ox taps

for simultaneous use of welding and fusion blowpipes.

Art. 4037/S
Art. 4038/S

Fusion blowtipe

Universal handgrip T3 with lance for noble metals, gas/ox tubes with couplings. Optional lance for poor alloys.

Art. 4030/S

Frame and click!

Use your mobile phone to get further information about this issue.

Universal welder
Art. 4000-S2
Universal welder with fusion blowpipe
Art. 4025/S

Universal Welder

Width	450	mm
Height	690	mm
Depht	280	mm
Weight	13	Kg

Unigas

Bunsen with thermocouple

This new UNIGAS bunsen burner with thermocouple was designed to comply with the latest law regulations. It can be used with all kinds of gases and at any pressure thanks to a new universal nozzle. The thermocouple is composed by a valve block and a sensor unit. This thermocouple is a safety device which stops the gas flux in case the flame goes out, avoiding a possible gas saturation of the room.

Frame and click!

Use your mobile phone to get further information about this issue.

Unigas
Art. 4056/B

Unigas

Width	123	mm
Height	105	mm
Depht	118	mm
Weight	0,5	Kg

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Notes

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